JPRO®

COMMERCIAL VEHICLE DIAGNOSTICS

DLA+ ADAPTER FAMILY

User's Manual

JPRO® DLA+ Adapter Family

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The JPRO® DLA+ Wireless adapter is compliant with Part 15 of the FCC Rules. The device contains an RF transmitter (ID 3867A MTCHDRCT). THE FCC ID is R68 MTCHDRCT.

www.noregon.com

www.JPROFleetProducts.com

Table of Contents

JPRO® DLA+ Adapter Family 2
Table of Contents 3
Introduction 5
The JPRO® DLA+ Adapter Family 5
LED Indicators 6
Product Specifications and System Requirements 8
Supported Protocols and Standards 9
Supply Voltage 10
Temperature 10
Electromagnetic Compatibility 10
Transient Protections 10
Electro-Static Discharge Protection 11
Installation Notes 12
Driver Installation 13
Found New Hardware Wizard 19
JPRO® DLA+ Wireless Configuration 24
The DLA+ Wireless Minder 24
Configuring the JPRO® DLA+ Wireless Adapter 26
Configuration on a Local / Corporate Network 30
Configuration on a Peer-to-Peer Network 34

Configuring Your PC to use the JPRO® DLA+ Wireless Adapter on a Peer-to-Peer network 38

Wireless Configuration using Windows® 7 ..... *39*

Wireless Configuration using Windows® Vista *54*

Wireless Configuration using Windows® XP *65*

Establishing the Connection Between your PC and the Adapter 75

The Favorites Feature to Select IP Addresses 79

Updating Adapter Firmware 82

Automatic Firmware Update *82*

Manual Firmware Update *85*

Wireless Reception Guidelines for JPRO® DLA+ Wireless 89

Testing Vehicle Connections 91

Frequently Asked Questions and Troubleshooting 92

Technical Support 94

Introduction

The JPRO® DLA+ Adapter Family

The JPRO® DLA+ Adapter Family (JPRO® DLA+, JPRO® DLA+ PLC & JPRO® DLA+ Wireless Adapters) are diagnostic devices that communicate with vehicle data for display on a PC-based diagnostic software application.

	DLA+	DLA+ PLC	DLA+ Wireless	Trailer Diagnostics
J1708	X	X	X	
Dual CAN/J1939	X	X	X	
K-Line (KWP, ISO9141)	X		X	
J1850 (VPW – GM)	X		X	
J2497 / PLC4Trucks		X		
USB Connectivity	X	X	X	
Wireless (802.11 b/g)			X	
Firmware updates (via USB)	X	X	X	
Power (from Vehicle)	X	X	X	
Power (from USB)	X		X	

NOTE: Instructional materials are also found on the installation CD or on the "Support" and "Downloads" sections of the www.JPROFleetProducts.com website.

LED Indicators

JPRO® DLA+ Adapter Family of products will support different LED indicators. The following table defines the LEDs and meaning per adapter:

JPRO® Adapter	Green LED (Power)	Red LED (Data)	Red LED (ABS LAMP)	Red LED (Wireless)
DLA+	X	X	N/A	N/A
DLA+ PLC	X	X	X	N/A
DLA+ Wireless	X	X	N/A	X
Trailer Diagnostics				

POWER (**green**) LED:

1. Off when no power is applied.
2. Illuminates green when vehicle is the single power source.

DATA (**red**) LED:

1. Flashes steady red when the device detects traffic regardless of protocol.
2. Flashes red once per second to indicate USB is the single power source and no other activity on the device is present (DLA+ Wireless only).

ABS Lamp (**red**) LED:

1. The device acts like the tractor ABS light and will follow the SAE J2497 standard.

WIRELESS (**red**) LED:

1. Indicates wireless network (802.11) communication.

Product Specifications and System Requirements

DLA+

DLA+ PLC

DLA+ Wireless

Trailer Diagnostics

32-Bit Operating System Requirements				
Windows XP (current service pack)	X	X	X	
Windows Vista Business (current service pack)	X	X	X	
Windows 7 Pro (current service pack)	X	X	X	
Windows 8	X	X	X	
32-bit Minimum PC Requirements				
Pentium IV or faster	X	X	X	
1 GB RAM	X	X	X	
100 MB free hard disk space	X	X	X	
1 free USB 2.0 port	X	X	X	
Wireless PC card required			X	

Supported Protocols and Standards

DLA+

DLA+ PLC

DLA+ Wireless

Truck Diagnostics

RP1210 Protocols				
CAN (GMLAN, J2284)	X	X	X	
J1708 / J1587	X	X	X	
J1850 (VPW – GM)	X		X	
J1939	X	X	X	
ISO 15765	X	X	X	
ISO 9141-2	X		X	
ISO 14230 (KWP2000)	X		X	
J2534 Protocols				
CAN (Raw CAN) ISO 11898	X		X	
GMLAN (HSCAN)	X		X	
ISO 9141-2	X		X	
ISO 14230 (KWP2000)	X		X	
ISO 15765-4	X		X	
J1850 VPW (GM Class II)	X		X	

Supply Voltage

The following table specifies the voltage required by the JPRO® DLA+ Adapters.

Vehicle Input Voltage Range	9-36 VDC
USB Voltage	5.0 VDC
Current Consumption	No more than 500mA

Temperature

The JPRO® DLA+ Adapters shall operate over the following temperatures and meet all of its functional and performance specifications.

Storage Range	-40° to 176° F	(-40° to 80° C)
Operating Range	0° to 149° F	(-18° to 65° C)

Electromagnetic Compatibility

The JPRO® DLA+ Wireless Adapters comply with FCC Part 15 technical standards with regard to electromagnetic radiation.

Transient Protections

The JPRO® DLA+ Wireless Adapters are designed to meet SAEJ1455 requirements for 12-volt systems.

Electro-Static Discharge Protection

The JPRO® DLA+ Wireless Adapters are designed to meet SAEJ1455 for 12-volt systems.

NOTE: Check the www.JPROFleetProducts.com website for the very latest product specifications and system requirements.

Installation Notes

Before installing drivers and adapters, note:

- Installation requires administration privileges.
- Installation steps (and subsequent screens) will vary based on user systems (Windows 7, Windows XP and Windows Vista) and type of adapter being installed. Most illustrated installation steps are for a DLA+ Wireless Adapter**.**
- Installation files can be accessed using a CD or online at www.JPROFleetProducts.com.

Insert the JPRO® DLA+ Driver CD or the JPRO® Commercial Fleet Diagnostics CD into your CD or DVD drive or download the latest adapter drivers from www.JPROFleetProducts.com.

If using the supplied CD, the installation program will begin automatically. Click the **Install Adapter Drivers** button to begin.

If using drivers downloaded from the website, begin the installation process by running the downloaded file.

Driver Installation

Periodically check www.JPROFleetProducts.com for the latest driver updates.

1. If the install program does not start automatically, start the program by running Setup.exe.
2. When the User Account Control box appears, select ***Yes*** to begin installation.
3. This screen appears; select the ***Next*** button.

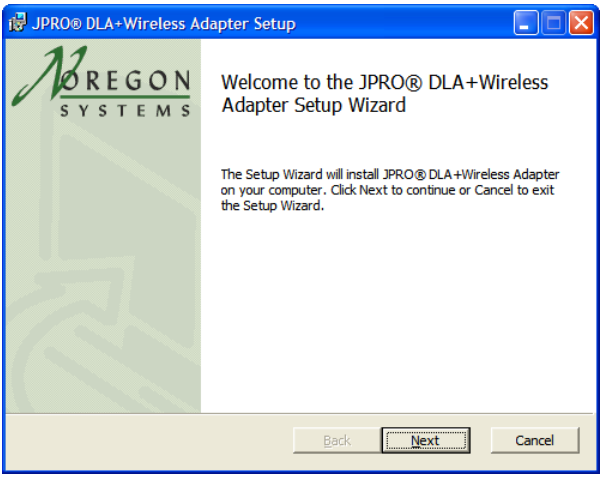

JPRO® DLA+Wireless Adapter Setup
OREGON SYSTEMS
Welcome to the JPRO® DLA+Wireless Adapter Setup Wizard
The Setup Wizard will install JPRO® DLA+Wireless Adapter on your computer. Click Next to continue or Cancel to exit the Setup Wizard.
Back
Next
Cancel

Figure 1

NOTE: The screen shown in the example reflects installing a DLA+ Wireless Adapter; however the driver installation steps for all JPRO DLA+ Adapters are the same.

4. Click the check box to accept the License Agreement and click the ***Next*** button.

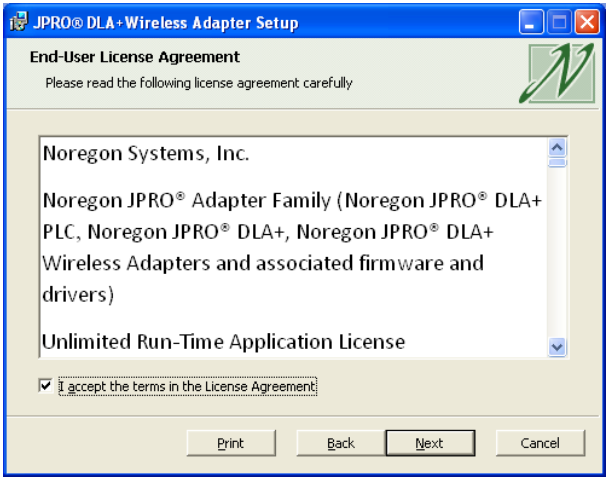

JPRO® DLA+ Wireless Adapter Setup
End-User License Agreement
Please read the following license agreement carefully
Noregon Systems, Inc.
Noregon JPRO® Adapter Family (Noregon JPRO® DLA+ PLC, Noregon JPRO® DLA+, Noregon JPRO® DLA+ Wireless Adapters and associated firmware and drivers)
Unlimited Run-Time Application License
I accept the terms in the License Agreement
Print
Back
Next
Cancel

Figure 2

5. Click the ***Next*** button.

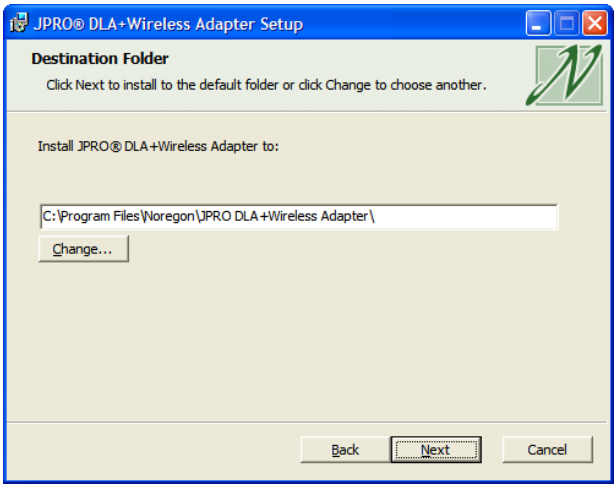


Figure 3

6. Click the ***Install*** button.

JPRO® DLA+Wireless Adapter Setup
Ready to install JPRO® DLA+Wireless Adapter
Click Install to begin the installation. Click Back to review or change any of your installation settings. Click Cancel to exit the wizard.
Back
Install
Cancel

Figure 4

If your system displays a security window (screen shot for illustration) again click the ***Install*** button.

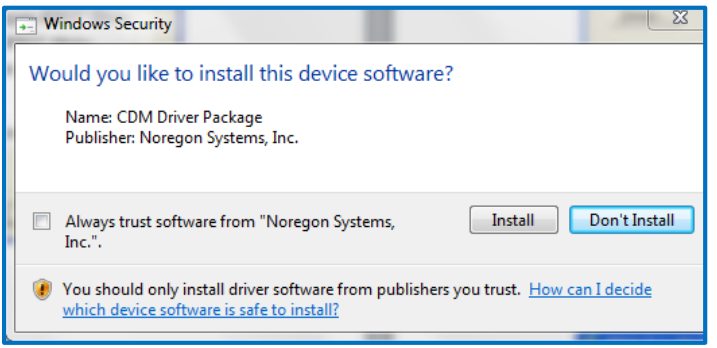

Windows Security
Would you like to install this device software?
Name: CDM Driver Package
Publisher: Noregon Systems, Inc.
Always trust software from "Noregon Systems, Inc.".
Install
Don't Install
You should only install driver software from publishers you trust. How can I decide which device software is safe to install?

Figure 5

7. The installation procedure will continue.

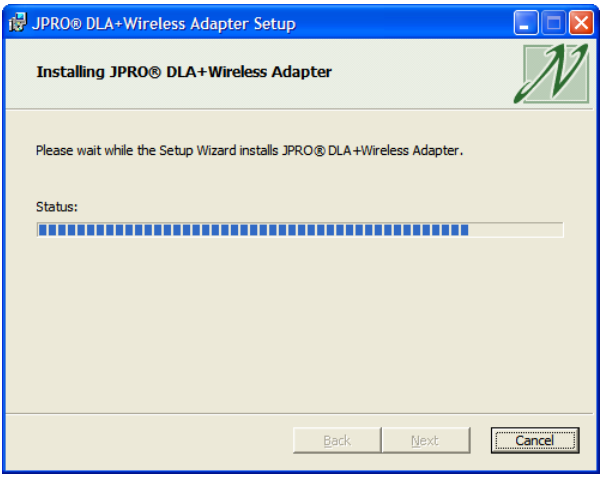


Figure 6

8. Click the ***Finish*** button.

Figure 7

Once the latest drivers are installed, you can install and begin to configure your adapter(s).

Found New Hardware Wizard

NOTE: The Found New Hardware Wizard is not used if the installation is being performed in Windows Vista or Windows 7.

NOTE: For Windows XP, if the Found New Hardware Wizard fails to start, be sure that the USB cable is pushed completely into the adapter's USB port and go to Start >> Control Panel >> Add Hardware.

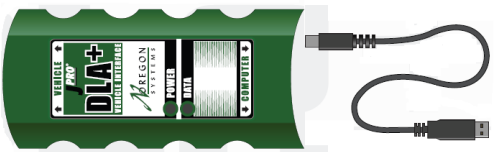
1. Close all other running applications

2. Connect the diagnostic cable to the Vehicle port on the adapter.

3. Attach the opposite end of the diagnostic cable connector to the diagnostic port on the vehicle.

4. Plug the USB cable into the USB port on the PC.

5. Connect the other end of the USB cable to the port labeled Computer on the adapter.



6. If asked to connect to Windows Update, select ***No, not this time*** and click the ***Next*** button.

Found New Hardware Wizard
Welcome to the Found New Hardware Wizard
Windows will search for current and updated software by looking on your computer, on the hardware installation CD, or on the Windows Update Web site (with your permission).
Read our privacy policy
Can Windows connect to Windows Update to search for software?
Yes, this time only
Yes, now and every time I connect a device
No, not this time
Click Next to continue.
< Back
Next >
Cancel

Figure 8

7. Select ***Install the software automatically*** and click the ***Next*** button and Windows will install the driver.

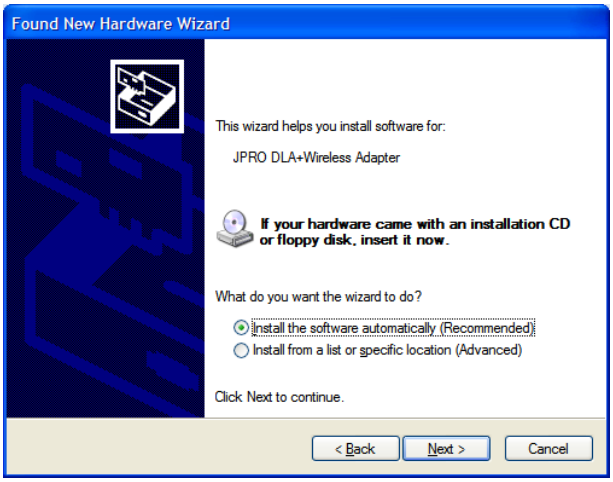

Found New Hardware Wizard
This wizard helps you install software for:
JPRO DLA+Wireless Adapter
If your hardware came with an installation CD or floppy disk, insert it now.
What do you want the wizard to do?
Install the software automatically (Recommended)
Install from a list or specific location (Advanced)
Click Next to continue.
< Back
Next >
Cancel

Figure 9

The install will display the following screens (or similar).

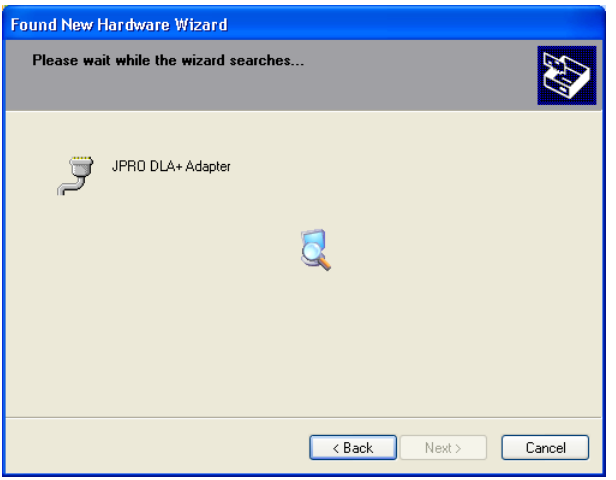


Figure 10

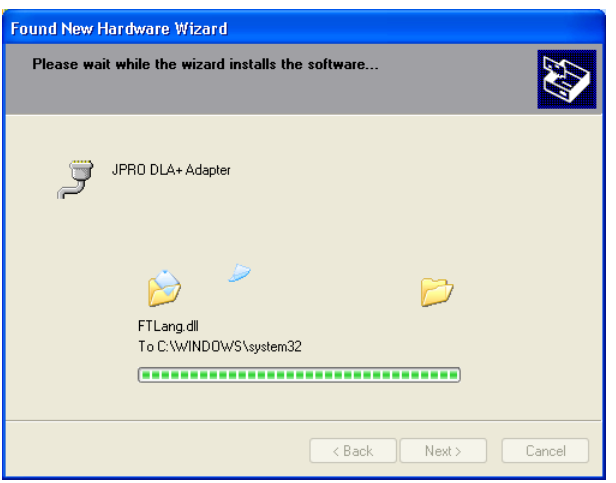


Figure 11

8. Click the ***Finish*** button to complete the installation.

Figure 12

NOTE: If using the DLA+ Wireless adapter, please proceed to the next section, JPRO® DLA+ Wireless Configuration, for configuration instructions on page 27.

Your adapter is ready for use with your diagnostic application!

JPRO® DLA+ Wireless Configuration

Before beginning wireless configuration, check the Support section of the www.JPROFleetProducts.com website for any notes or changes to the DLA+ Wireless configuration process.

You must first install the necessary drivers before configuring the DLA+ Wireless Adapter to work with your PC for diagnostic applications. Please be sure to follow the instructions in the ***Installation*** section beginning on page 13.

The DLA+ Wireless Minder

After drivers are installed, your System Task Bar displays the DLA+ Wireless Minder icon (if your system is set to display Task Bar icons).

Figure 13

If you scroll your cursor over the icon, the message, "DLA+ Wireless Minder: No Adapter IP Found" will appear.

If you right click on the icon and select "Show Details", a box will display that your DLA+ Wireless Adapter is not yet configured and therefore not getting a signal as indicated by the red "Round Trip Time (ms)" status bar.

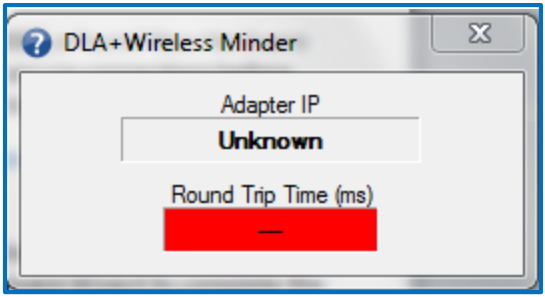


Figure 14

Once you have configured and assigned an IP address to the DLA+ Wireless Adapter, connected to a wireless network, and the reception is strong, the status bar will become green as seen on page 78.

As just noted, even after you have configured your DLA+ Wireless Adapter to a wireless network, you may get a poor transmission signal. To ensure a stronger signal, you may need to move your PC and DLA+ Wireless Adapter closer to each other.

NOTE: Before setting up a connection between your PC and the DLA+ Wireless Adapter, you must know if you will use a local / corporate network or peer-to-peer connection. It is recommended you contact your network administrator for local / corporate network configuration.

Configuring the JPRO® DLA+ Wireless Adapter

To configure the adapter for the first time, or to change its network settings, follow these steps:

NOTE: If you have already installed your drivers (see page 13), Steps 1 and 2 may already be complete.

1. Plug the USB cable into the USB port on the PC.

2. Connect the other end of the USB cable to the port labeled Computer on the adapter.

3. You will see the "Wireless" LED flash and then stop while the "Data" LED pulses regularly indicating the adapter is ready for a data connection. From the Start menu, if JPRO DLA+ Wireless Configuration Tool does not automatically appear in the list of programs, go to All Programs ▶ Noregon ▶ JPRO® DLA+ Wireless Adapter menu and open **JPRO® DLA+ Wireless Configuration Tool**.

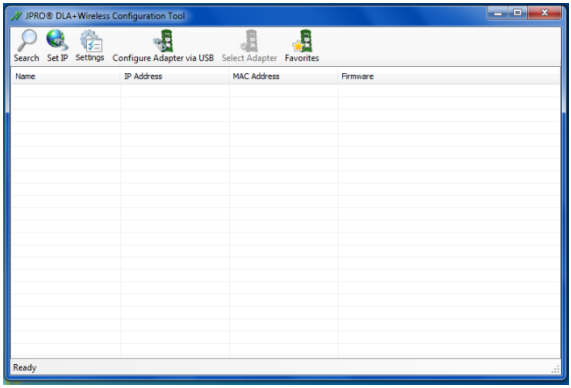


Figure 15

NOTE: Depending on your system security settings, you may receive a Windows Security Alert similar to the one in Figure 16. If so, verify the name of the program in the alert is the JPRO® DLA+ Wireless Configuration Tool and click the Unblock button.

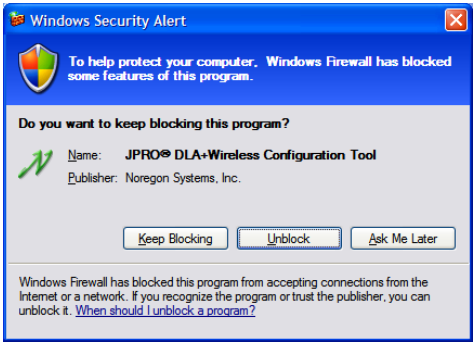

Windows Security Alert
To help protect your computer, Windows Firewall has blocked some features of this program.
Do you want to keep blocking this program?
Name: JPRO® DLA+Wireless Configuration Tool
Publisher: Noregon Systems, Inc.
Keep Blocking
Unblock
Ask Me Later
Windows Firewall has blocked this program from accepting connections from the Internet or a network. If you recognize the program or trust the publisher, you can unblock it. When should I unblock a program?

Figure 16

4. Click the ***Configure Adapter via USB*** button on the toolbar (see highlighted box in Figure 17).

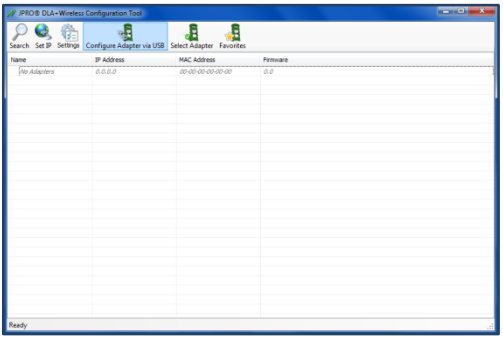


Figure 17

Below are default settings that will appear while configuring your DLA+ Wireless Adapter:

Network Name (SSID)	LTRX_IBSS
Network Type	Peer-to-Peer
Channel	11
Security	None
IP Address	192.168.2.100
Subnet Mask	255.255.255.0
Gateway IP	0.0.0.0
DNS Server IP	0.0.0.0
Adapter Name*	NORWIRE32-*xxxx*

*the last four characters of the Adapter Name will match the last four characters of the MAC Address shown on the label on the back of your adapter.

Configuration on a Local / Corporate Network

NOTE: If you are configuring your DLA+ Wireless Adapter to connect to a local / corporate network, it is highly recommended to consult your network administrator.

NOTE: For editing your DLA+ Wireless Adapter, your administrator can refer to defaults on page 29.

Once you have clicked **Configure Adapter via USB,** this screen will appear.

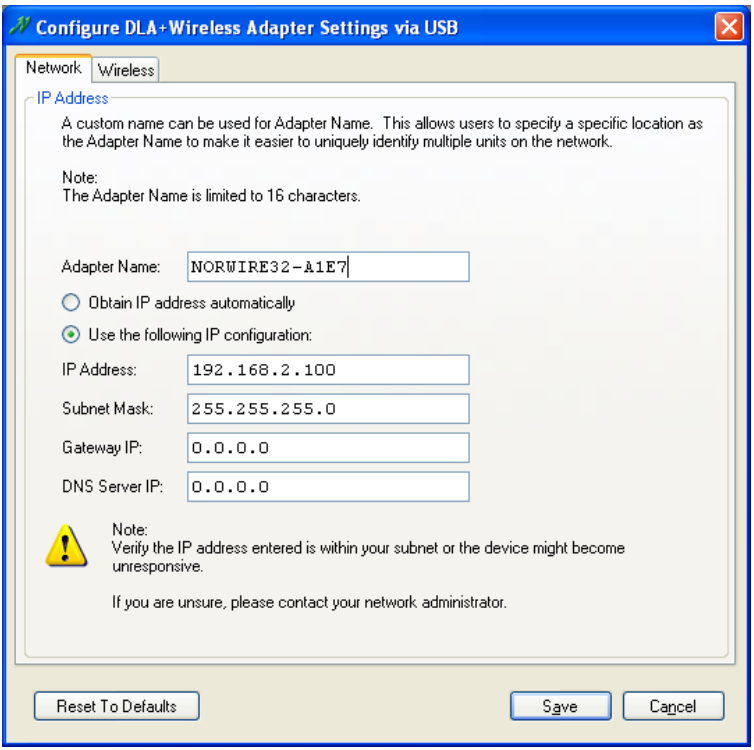

Configure DLA+Wireless Adapter Settings via USB
Network
Wireless
IP Address
A custom name can be used for Adapter Name. This allows users to specify a specific location as the Adapter Name to make it easier to uniquely identify multiple units on the network.
Note:
The Adapter Name is limited to 16 characters.
Adapter Name:
NORWIRE32-A1E7
Obtain IP address automatically
Use the following IP configuration:
IP Address:
192.168.2.100
Subnet Mask:
255.255.255.0
Gateway IP:
0.0.0.0
DNS Server IP:
0.0.0.0
Note:
Verify the IP address entered is within your subnet or the device might become unresponsive.
If you are unsure, please contact your network administrator.
Reset To Defaults
Save
Cancel

Figure 18

Toggle between the ***Network*** and ***Wireless*** tabs where the default settings display.

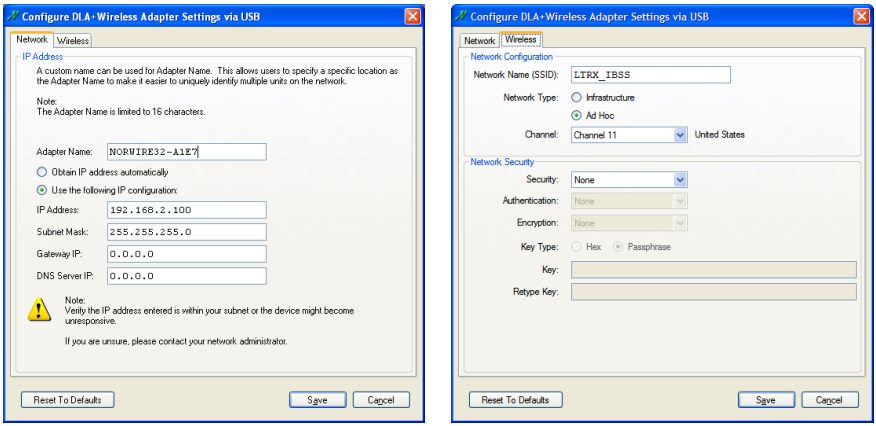


Figure 19

5. On the ***Network*** tab enter the assigned IP address from your network administrator as well as the values for the Subnet Mask, Gateway IP and DNS Server IP. You can also modify the default adapter name.

6. Toggle to the ***Wireless*** tab and enter the Network Name (SSID) provided by your administrator. Then, at **Network Type**, select the radio button**, Infrastructure.**

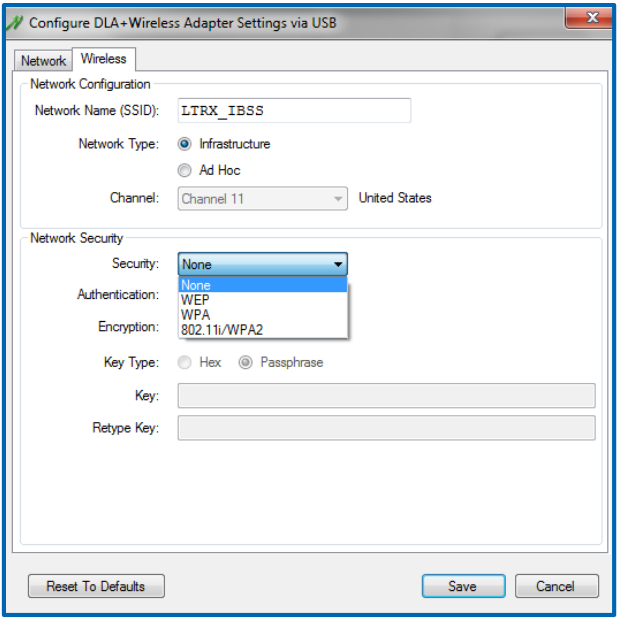


Figure 20

7. Select the appropriate Security option from the drop down in the ***Security*** field.

8. Enter the Network Security values. Authentication, Encryption, Key Type, Key and Retype Key then click **Save**.

10. After selecting ***OK***, this screen will appear indicating your JPRO DLA+ Wireless Adapter is configured and ready to be connected with your PC once a network connection is established (see page 38).

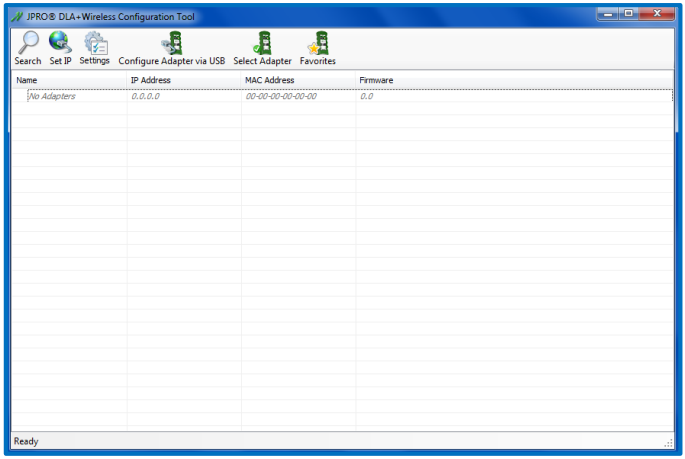


Figure 21

You can minimize this screen so it will be available after you have established your wireless network and are ready to connect to your DLA+ Wireless Adapter.

Configuration on a Peer-to-Peer Network

Configuring a DLA+ Wireless Adapter on a peer-to-peer network means the DLA+ Wireless Adapter will communicate with your PC without going through a local / corporate network.

To refer to the DLA+ Wireless Adapter default settings you will edit, see page 29.

Once you have clicked **Configure Adapter via USB,** this screen will appear.

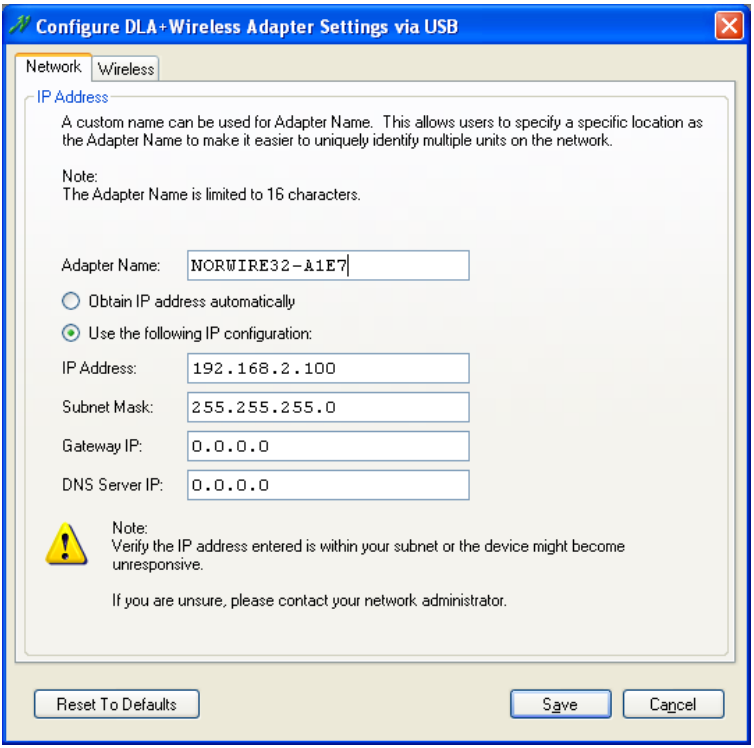
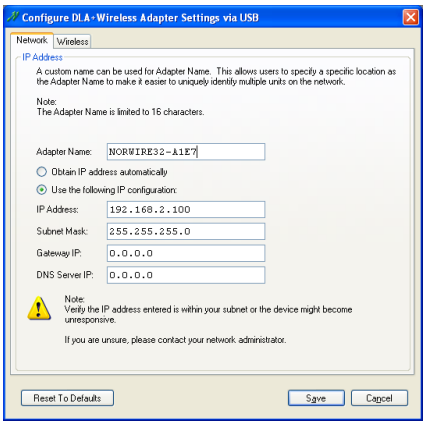

Configure DLA+Wireless Adapter Settings via USB
Network
Wireless
IP Address
A custom name can be used for Adapter Name. This allows users to specify a specific location as the Adapter Name to make it easier to uniquely identify multiple units on the network.
Note:
The Adapter Name is limited to 16 characters.
Adapter Name:
NORWIRE32-A1E7
Obtain IP address automatically
Use the following IP configuration:
IP Address:
192.168.2.100
Subnet Mask:
255.255.255.0
Gateway IP:
0.0.0.0
DNS Server IP:
0.0.0.0
Note:
Verify the IP address entered is within your subnet or the device might become unresponsive.
If you are unsure, please contact your network administrator.
Reset To Defaults
Save
Cancel

Figure 22

Toggle between the ***Network*** and ***Wireless*** tabs where the default settings display.


Configure DLA+Wireless Adapter Settings via USB
Network
Wireless
IP Address
A custom name can be used for Adapter Name. This allows users to specify a specific location as the Adapter Name to make it easier to uniquely identify multiple units on the network.
Note:
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Adapter Name:
NORWIRE32-A1E7
Obtain IP address automatically
Use the following IP configuration:
IP Address:
192.168.2.100
Subnet Mask:
255.255.255.0
Gateway IP:
0.0.0.0
DNS Server IP:
0.0.0.0
Note:
Verify the IP address entered is within your subnet or the device might become unresponsive.
If you are unsure, please contact your network administrator.
Reset To Defaults
Save
Cancel

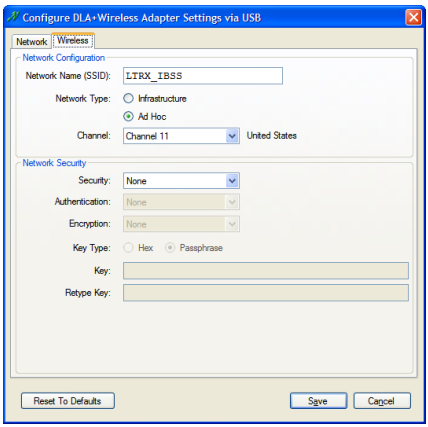


Figure 23

From the ***Network*** tab, ensure the last 3 digits in the **IP Address** field are unique (numbers can only be from 1 to 255).

1. Toggle to the ***Wireless*** tab and note the default settings for the DLA + Wireless Adapter.

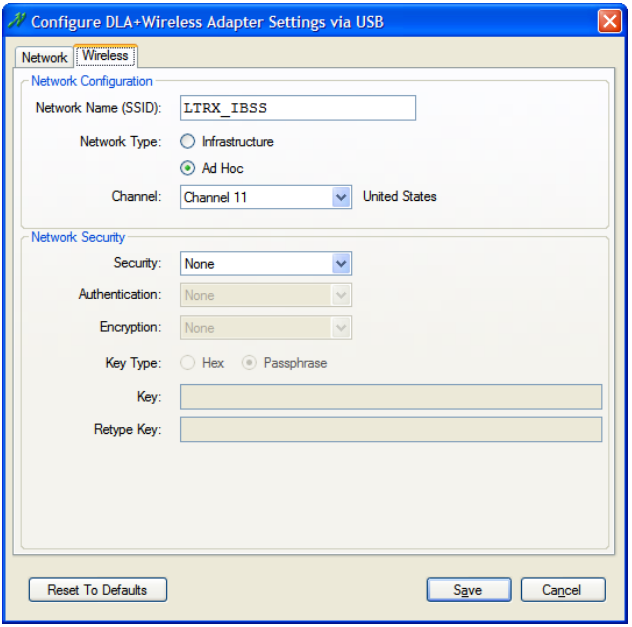


Figure 24

2. Click the ***Save*** button to commit the settings to the DLA+ Wireless Adapter.

4. Select ***OK*** on the below dialog.

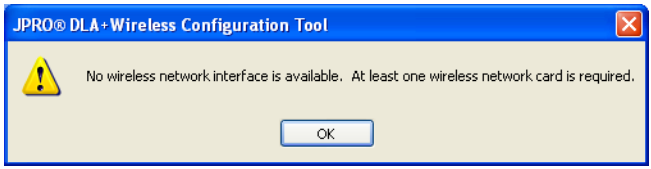

JPRO® DLA+Wireless Configuration Tool
No wireless network interface is available. At least one wireless network card is required.
OK

Figure 25

5. After selecting ***OK***, this screen will appear indicating your JPRO DLA+ Wireless Adapter is configured and ready to be connected with your PC once a network connection is established.

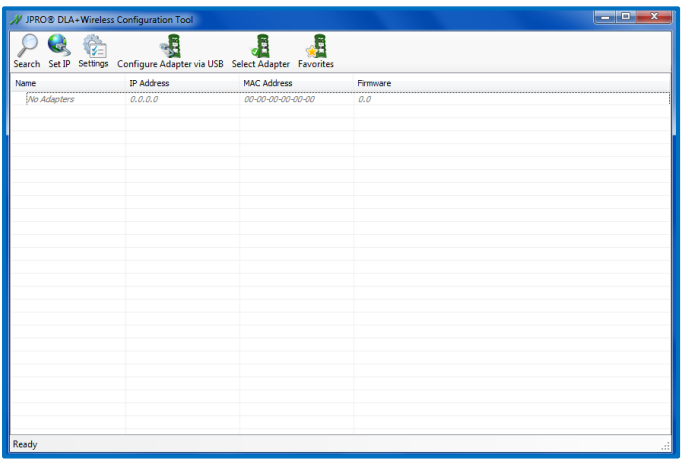


Figure 26

You can minimize this screen so it will be available after you have established your wireless network and are ready to connect to your DLA+ Wireless Adapter.

Proceed with Configuring Your PC to use the JPRO® DLA+ Wireless Adapter on a Peer-to-Peer network on page 38 to continue setup.

Configuring Your PC to use the JPRO® DLA+ Wireless Adapter on a Peer-to-Peer network

NOTE: If you have configured your adapter to work on your local / corporate network and your PC is connected to your local / corporate network, then skip to page 75, Establishing the Connection Between your PC and the Adapter.

If your PC is using a third-party OEM wireless utility to manage your wireless card, please consult the OEM manual for instructions on wireless configuration.

Depending on the version of Windows your PC is running, see the appropriate section below:

Wireless Configuration using Windows® 7 ..... *39*

Wireless Configuration using Windows® Vista *54*

Wireless Configuration using Windows® XP *65*

Wireless Configuration using Windows® 7

1. Click the ***Start*** button and click **Control Panel**.

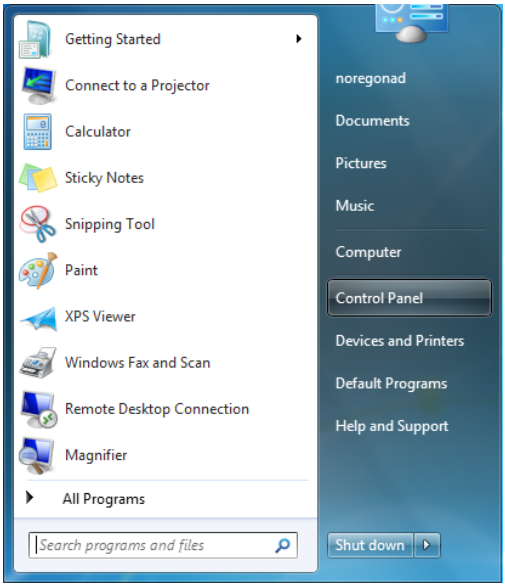


Figure 27

2. Click the ***Network and Internet*** link.

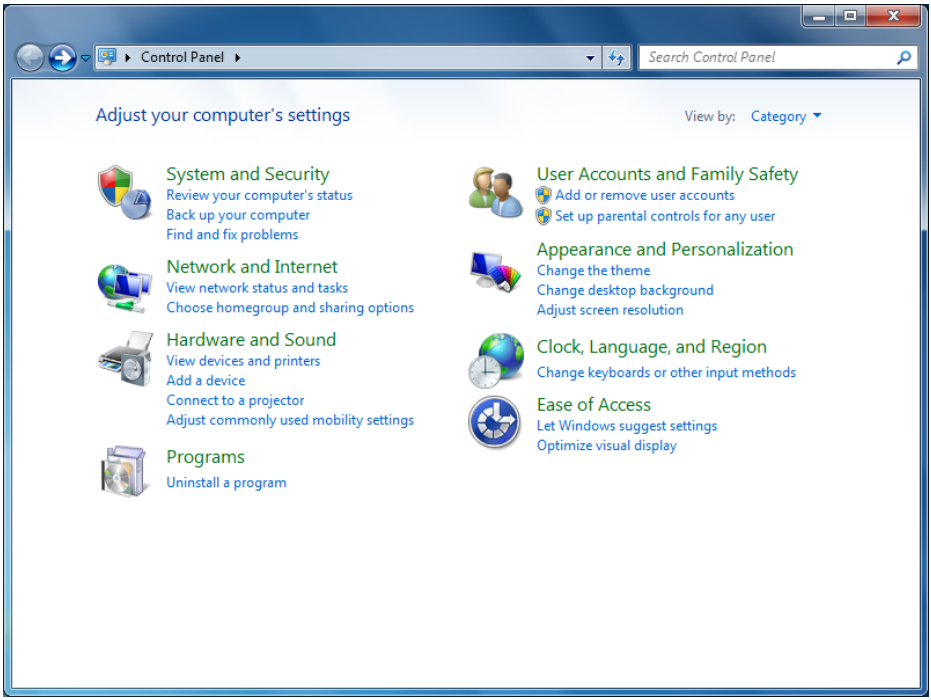


Figure 28

3. Under the **Network and Sharing Center** section, click ***Connect to a Network***.

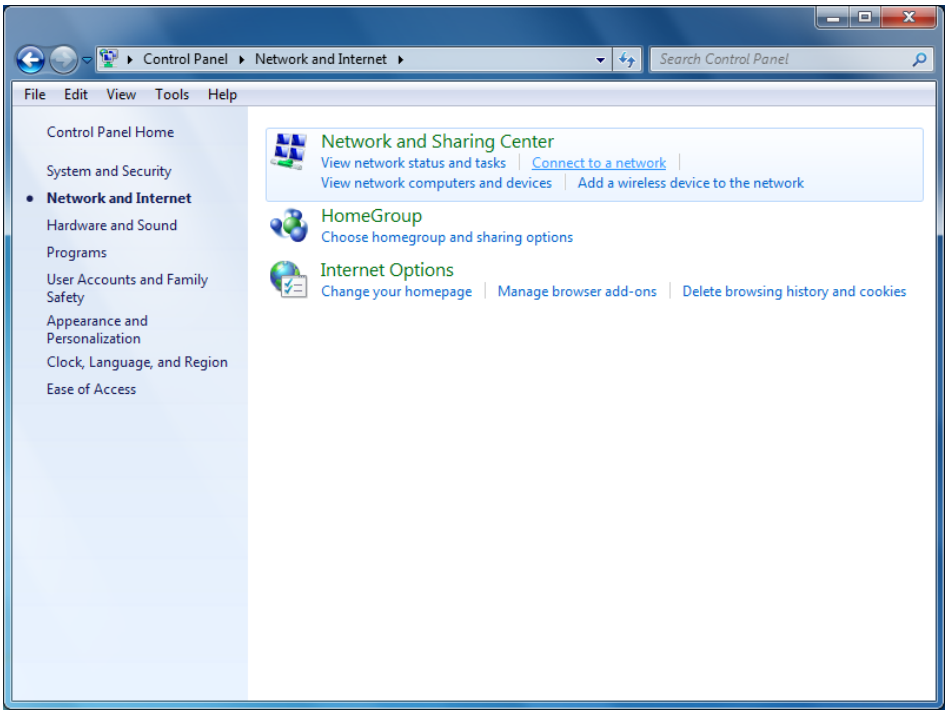


Figure 29

4. Select the **LTRX_IBSS** network in the Wireless Network list and click the ***Connect*** button.

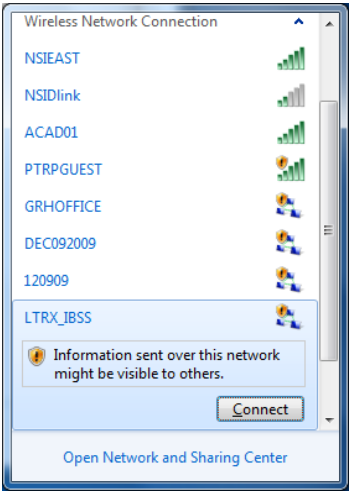


Figure 30

5. Under the **Network and Sharing Center** section, click again ***Connect to a Network***.

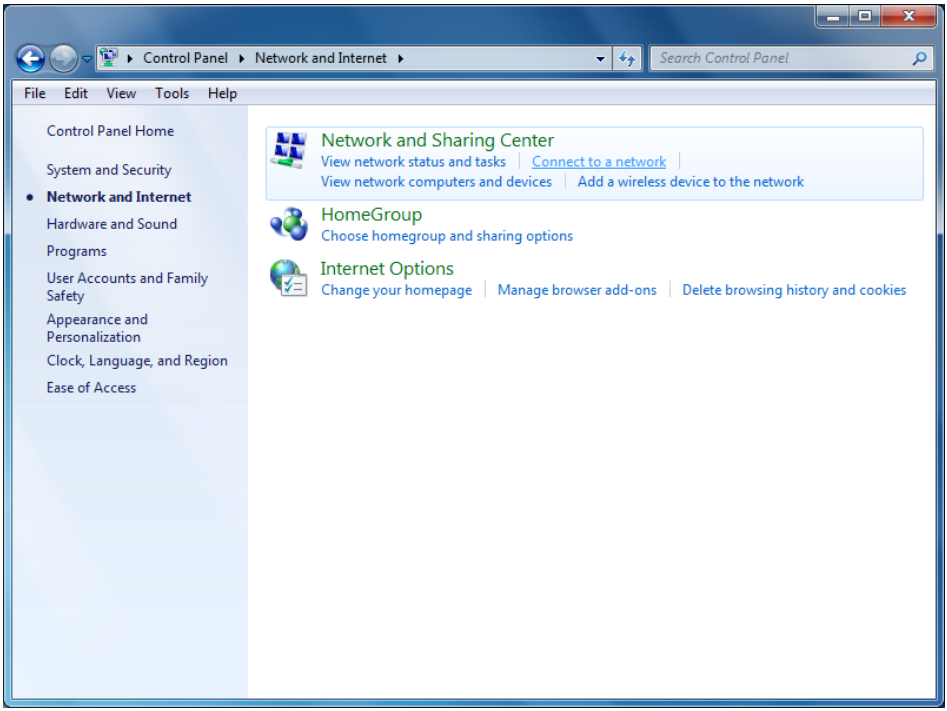

Control Panel ▸ Network and Internet ▸
Search Control Panel
File Edit View Tools Help
Control Panel Home
System and Security
Network and Internet
Hardware and Sound
Programs
User Accounts and Family Safety
Appearance and Personalization
Clock, Language, and Region
Ease of Access
Network and Sharing Center
View network status and tasks | Connect to a network
View network computers and devices | Add a wireless device to the network
HomeGroup
Choose homegroup and sharing options
Internet Options
Change your homepage | Manage browser add-ons | Delete browsing history and cookies

Figure 31

6. Right click on the **LTRX_IBSS** network and select ***Status*.**

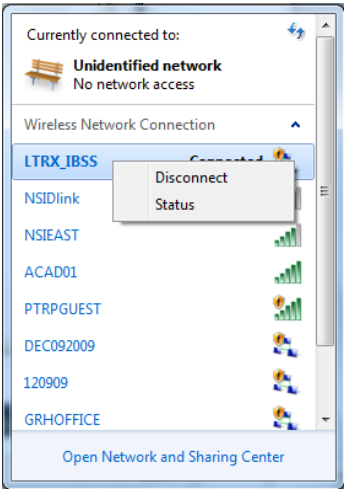


Figure 32

7. Click the ***Properties*** button.

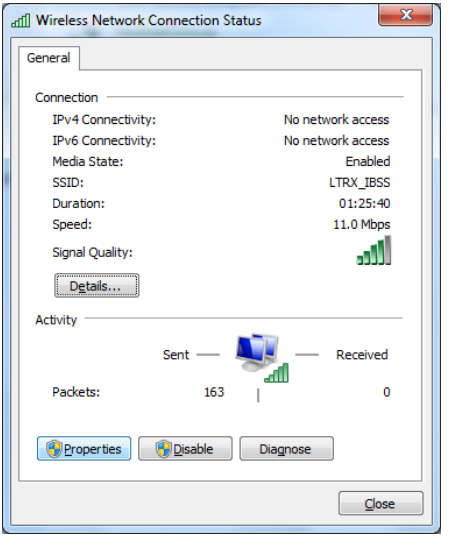


Figure 33

8. Highlight **Internet Protocol Version 4(TCP/IPv4)** and click the ***Properties*** button.

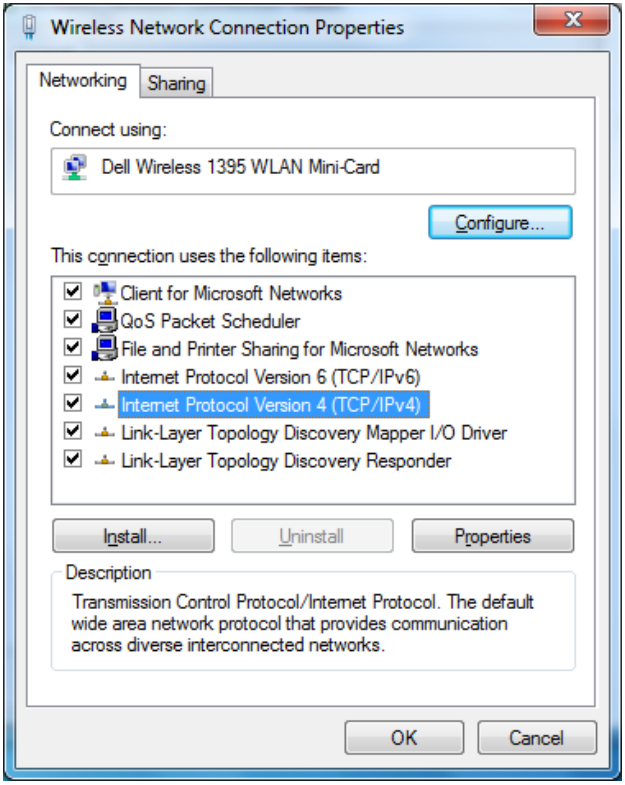


Figure 34

9. Select ***Use the following IP address*** radio button to assign the static IP address.
   - The first three values of the IP address (i.e. 192.168.2) must match the Adapter's IP address you wrote down on page 33. The fourth value must be unique and from 1 to 255.
   - If using the 192.168.2.xxx IP address range, the Subnet mask will default to 255.255.255.0 when you finish entering the IP address or press **Tab**.
   - The Default gateway IP address should remain blank.

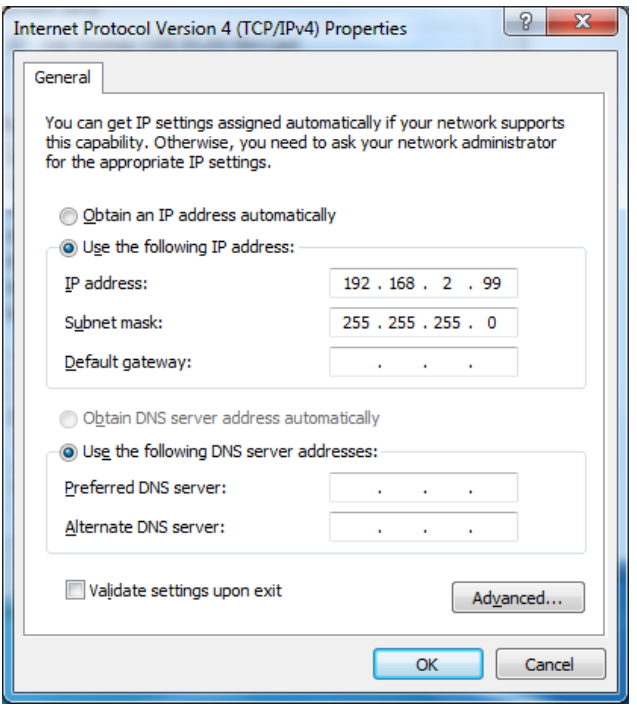

Internet Protocol Version 4 (TCP/IPv4) Properties
General
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address:
192 . 168 . 2 . 99
Subnet mask:
255 . 255 . 255 . 0
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Validate settings upon exit
Advanced...
OK
Cancel

Figure 35

10. Click the ***OK*.**
11. Click ***Close*** twice, first to close the Wireless Network Connection Properties and then the Wireless Network Connection Status.
12. Under the **Network and Sharing Center** section click the ***View Network Status and Tasks*** button.

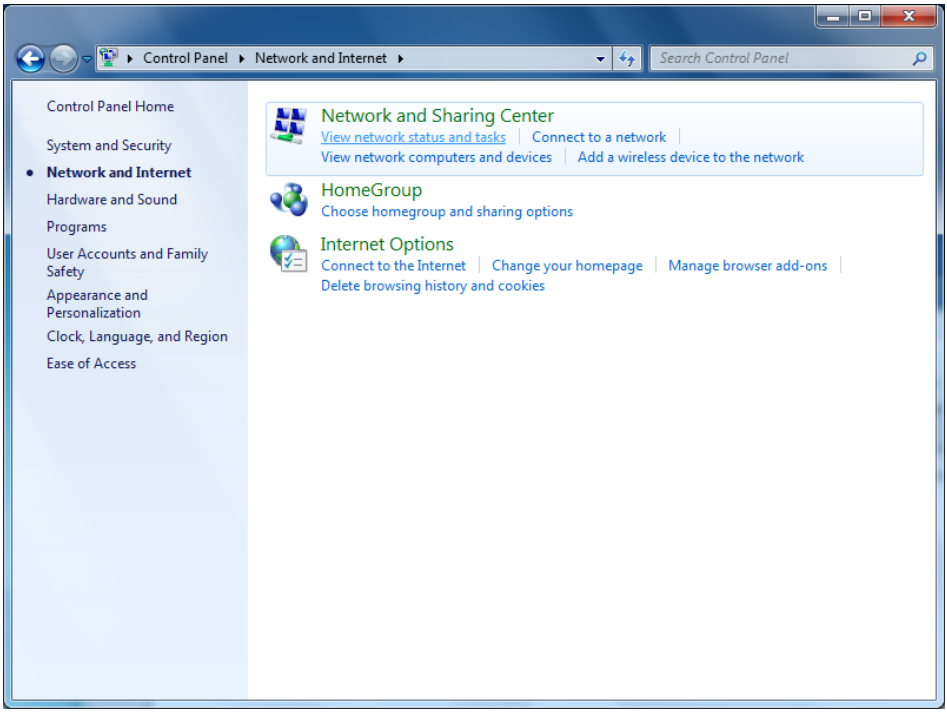


Figure 36

13. On the left side of the dialog, click the ***Manage Wireless Networks*** link (see highlighted box in Figure 37 below).

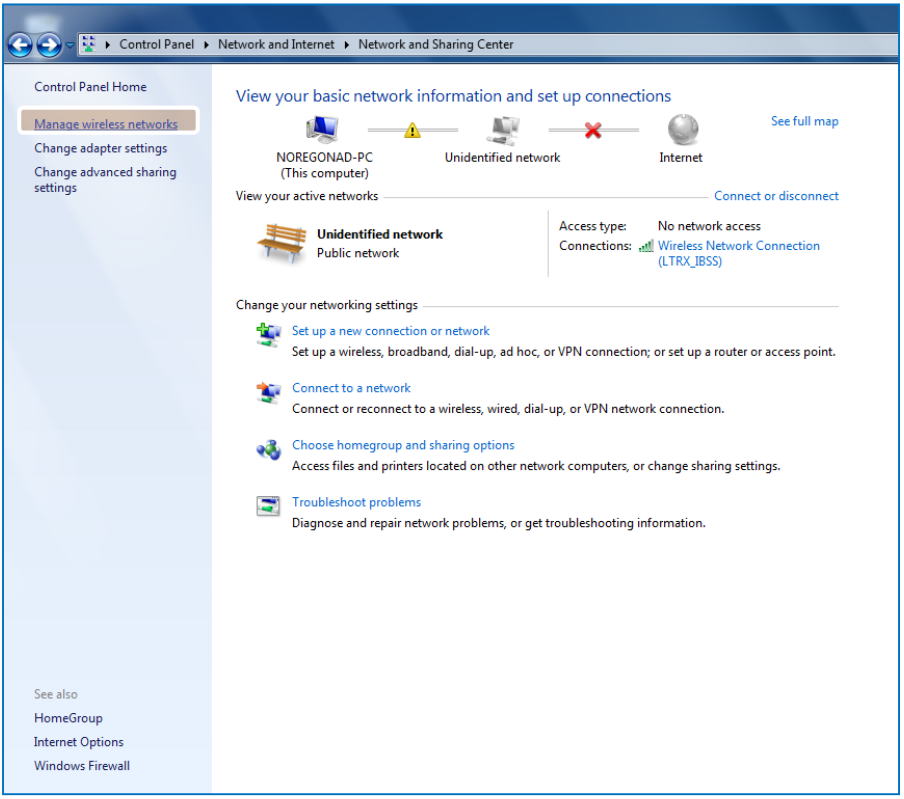

Control Panel ▸ Network and Internet ▸ Network and Sharing Center
Control Panel Home
Manage wireless networks
Change adapter settings
Change advanced sharing settings
View your basic network information and set up connections
See full map
NOREGONAD-PC
(This computer)
Unidentified network
Internet
View your active networks
Connect or disconnect
Unidentified network
Public network
Access type: No network access
Connections: Wireless Network Connection (LTRX_IBSS)
Change your networking settings
Set up a new connection or network
Set up a wireless, broadband, dial-up, ad hoc, or VPN connection; or set up a router or access point.
Connect to a network
Connect or reconnect to a wireless, wired, dial-up, or VPN network connection.
Choose homegroup and sharing options
Access files and printers located on other network computers, or change sharing settings.
Troubleshoot problems
Diagnose and repair network problems, or get troubleshooting information.
See also
HomeGroup
Internet Options
Windows Firewall

Figure 37

14. Click the ***Add*** button (see highlighted box in Figure 38 below).

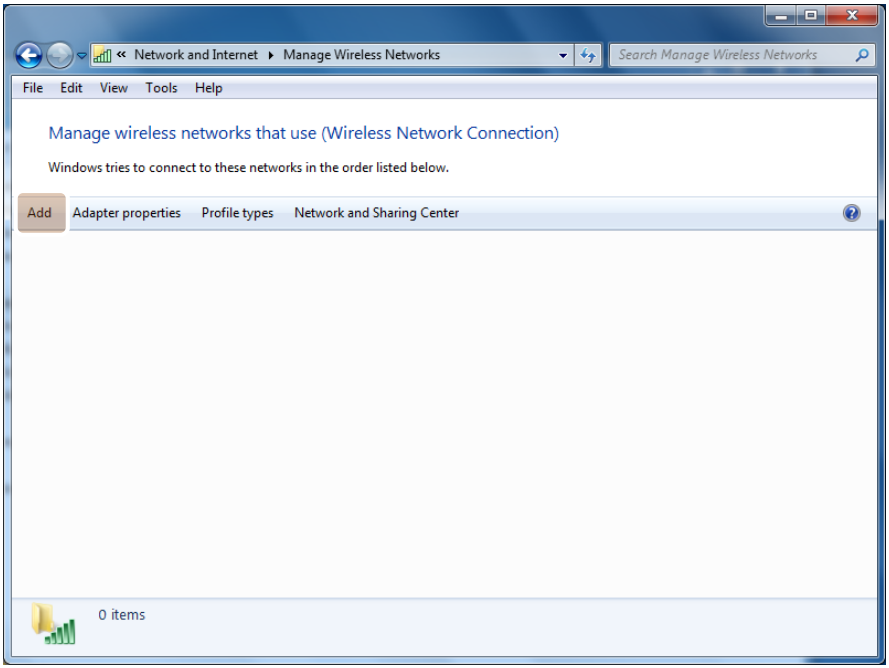

« Network and Internet ▸ Manage Wireless Networks
Search Manage Wireless Networks
File Edit View Tools Help
Manage wireless networks that use (Wireless Network Connection)
Windows tries to connect to these networks in the order listed below.
Add
Adapter properties
Profile types
Network and Sharing Center
0 items

Figure 38

15. Click ***Manually Create a Network Profile***.

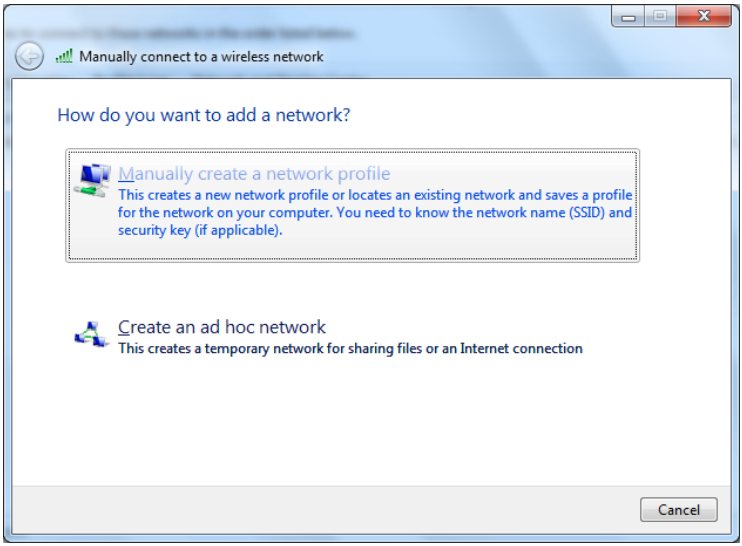

Manually connect to a wireless network
How do you want to add a network?
Manually create a network profile
This creates a new network profile or locates an existing network and saves a profile for the network on your computer. You need to know the network name (SSID) and security key (if applicable).
Create an ad hoc network
This creates a temporary network for sharing files or an Internet connection
Cancel

Figure 39

16. Enter LTRX_IBSS in the Network name field exactly as shown (name is case sensitive) in Figure 41.

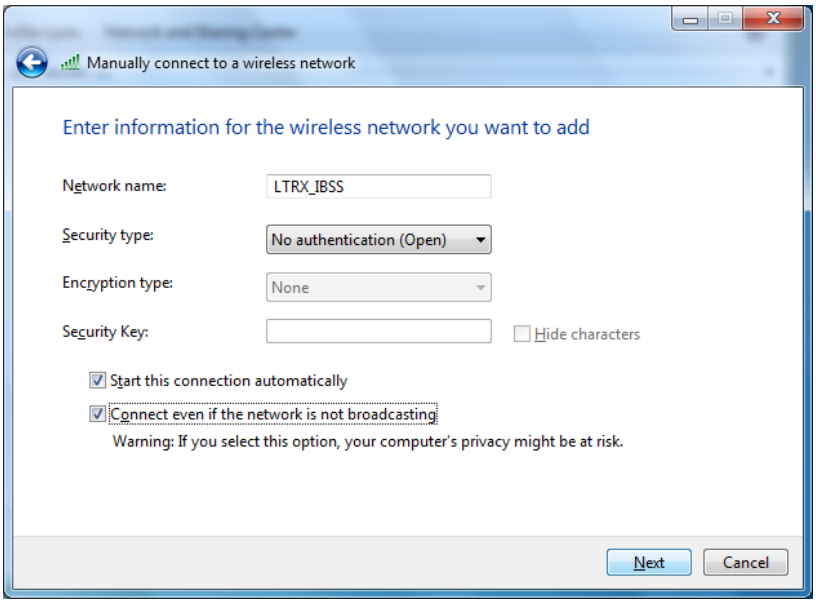


Figure 40

17. Select ***No authentication (Open)*** from the Security Type dropdown list.
18. Click the ***Next*** button.

NOTE: Windows 7 does not support automatic connections on unsecure peer-to-peer networks. You will need to re-select the LTRX_IBSS network each time you reboot your PC.

19. Click the ***Close*** button.

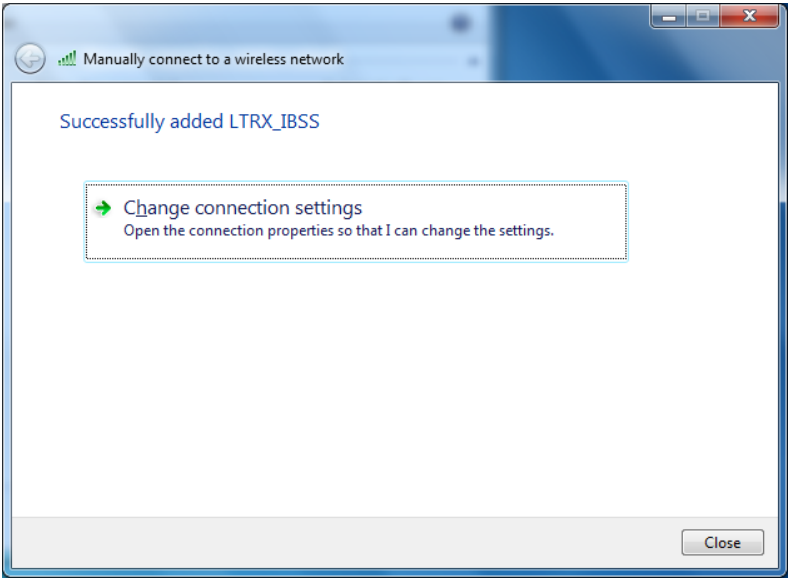

Manually connect to a wireless network
Successfully added LTRX_IBSS
Change connection settings
Open the connection properties so that I can change the settings.
Close

Figure 41

20. The Wireless Network Connection list is updated to display the network you just added.

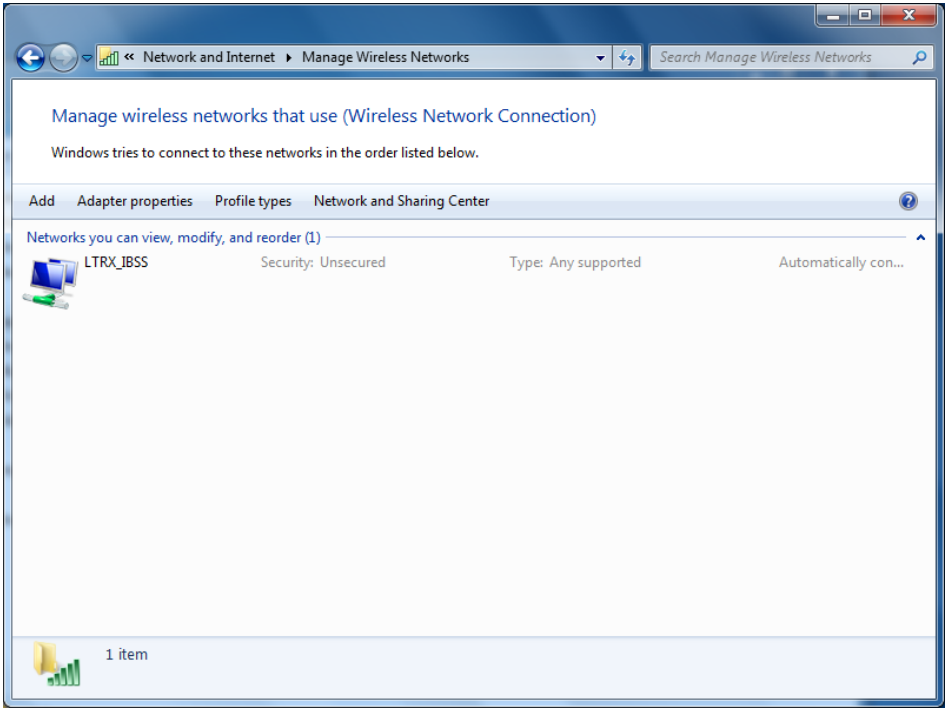

« Network and Internet ▸ Manage Wireless Networks
Search Manage Wireless Networks
Manage wireless networks that use (Wireless Network Connection)
Windows tries to connect to these networks in the order listed below.
Add
Adapter properties
Profile types
Network and Sharing Center
Networks you can view, modify, and reorder (1)
LTRX_IBSS
Security: Unsecured
Type: Any supported
Automatically con...
1 item

Figure 42

21. Proceed to the ***Establishing the Connection Between your PC and the Adapter*** on page 75.

Wireless Configuration using Windows® Vista

1. Click the ***Start*** button and click **Connect To**.

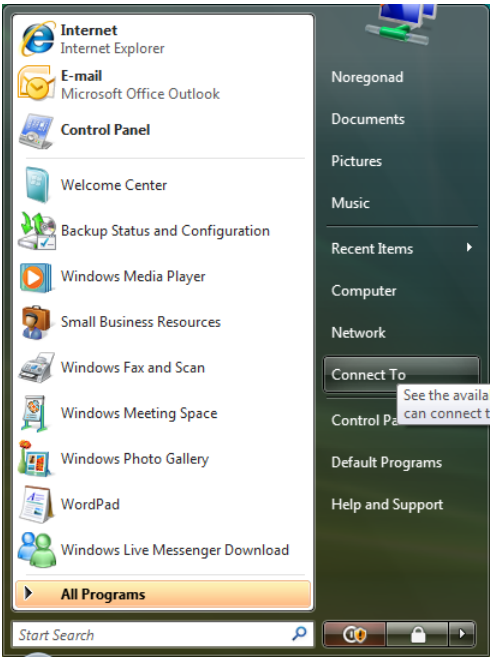


Figure 43

2. Select **LTRX_IBSS** from the network list and click the ***Connect*** button.

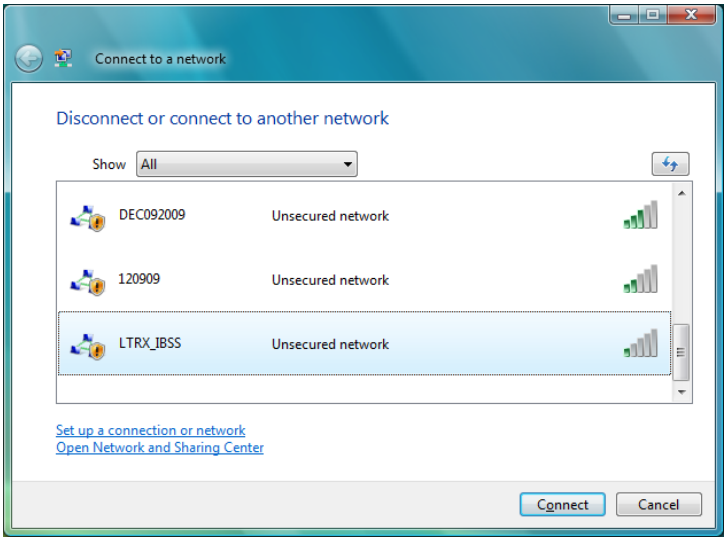


Figure 44

3. Depending on your system security settings, you may receive an "unsecured network" message similar to the one in Figure 45. If so, click ***Connect Anyway***.

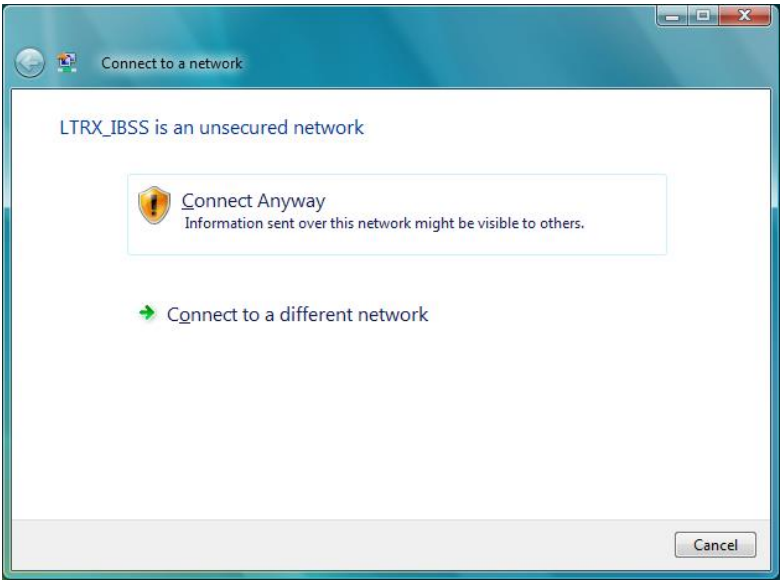

Connect to a network
LTRX_IBSS is an unsecured network
Connect Anyway
Information sent over this network might be visible to others.
Connect to a different network
Cancel

Figure 45

4. Check the **Save this network** checkbox and click the ***Close*** button.

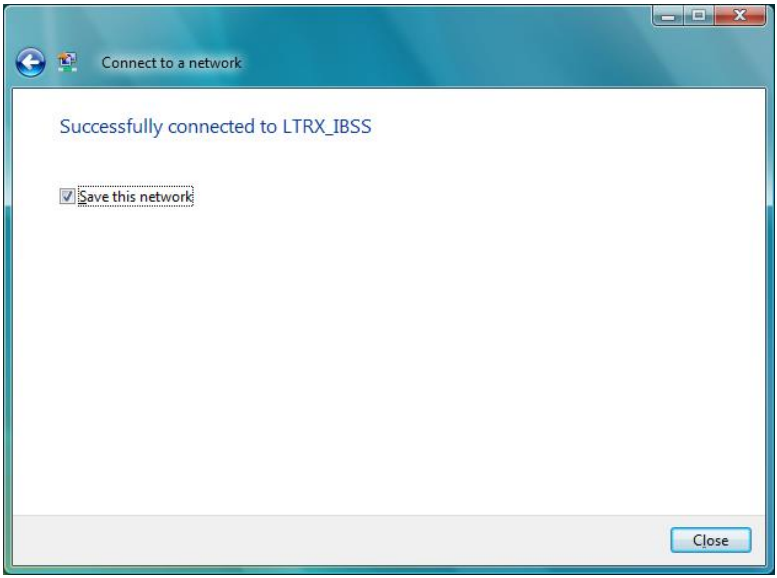


Figure 46

5. Click the ***Start*** button and click **Control Panel**.

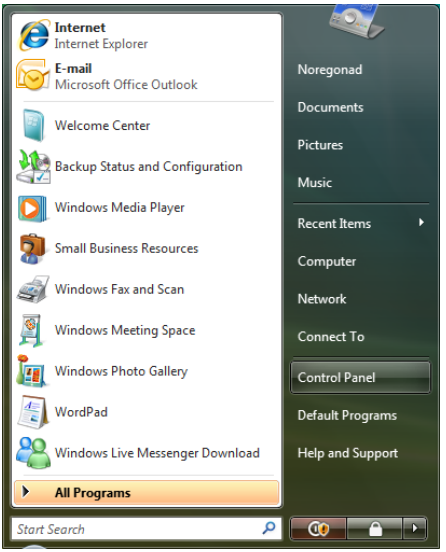


Figure 47

6. Click ***View Network Status and Tasks*** from the **Network and Internet** section (see highlighted box in Figure 48 below).

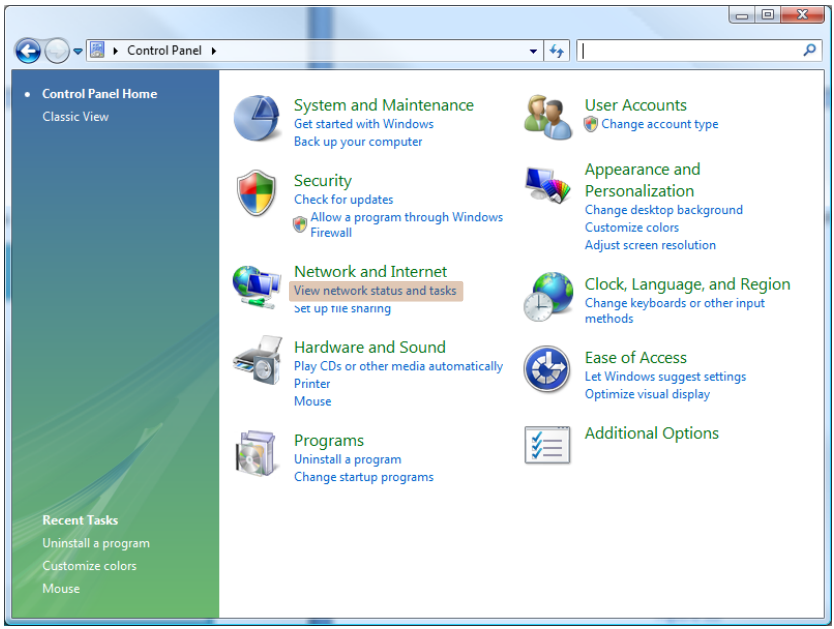


Figure 48

7. On the left side of the Network and Sharing Center dialog, click the ***Manage Network Connections*** link (see highlighted box in Figure 49 below).

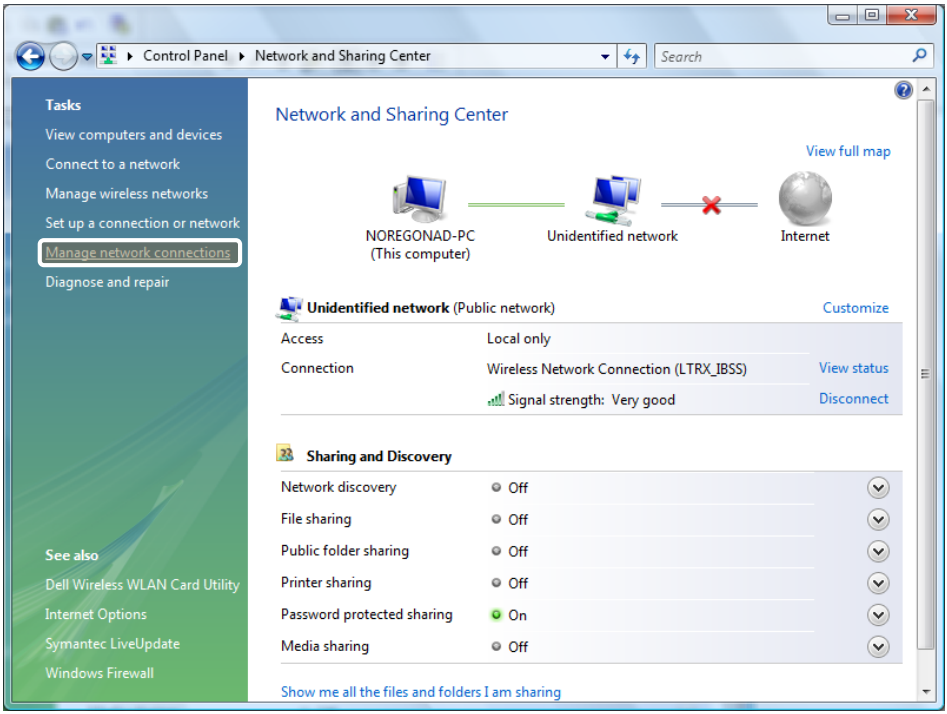


Figure 49

8. Right-click on **Wireless Network Connection – Unidentified Network** and select ***Status***.

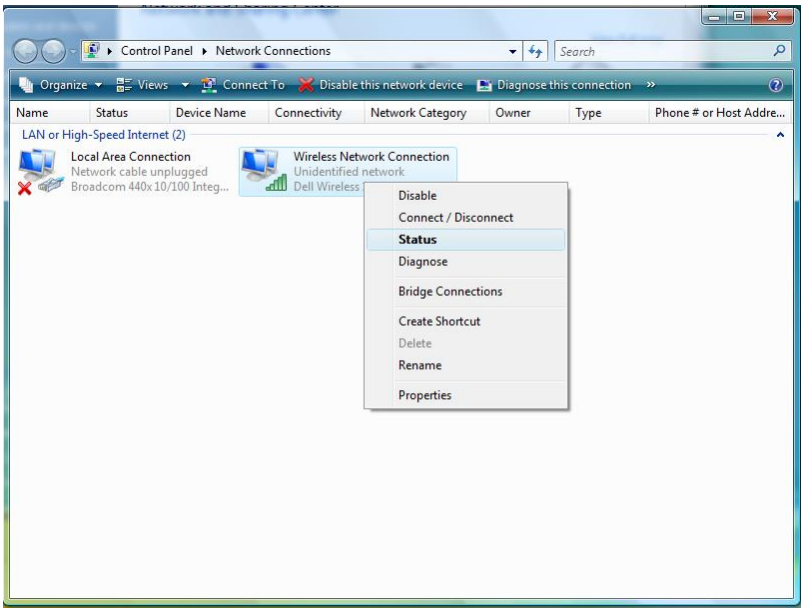


Figure 50

9. Click the ***Properties*** button.

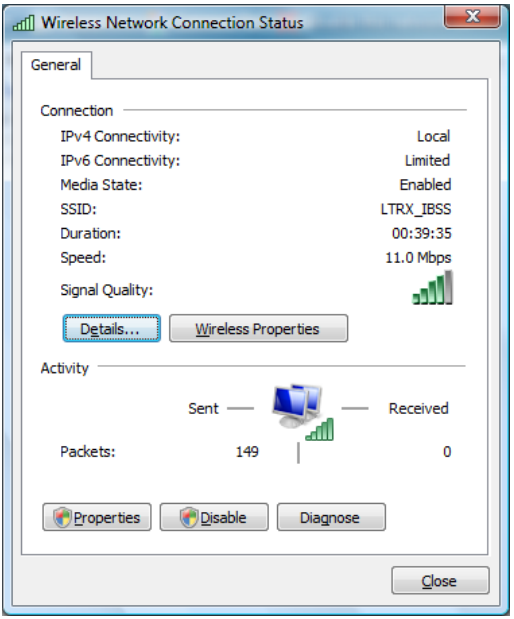


Figure 51

10. Highlight **Internet Protocol Version 4(TCP/IPv4)** and click the ***Properties*** button.

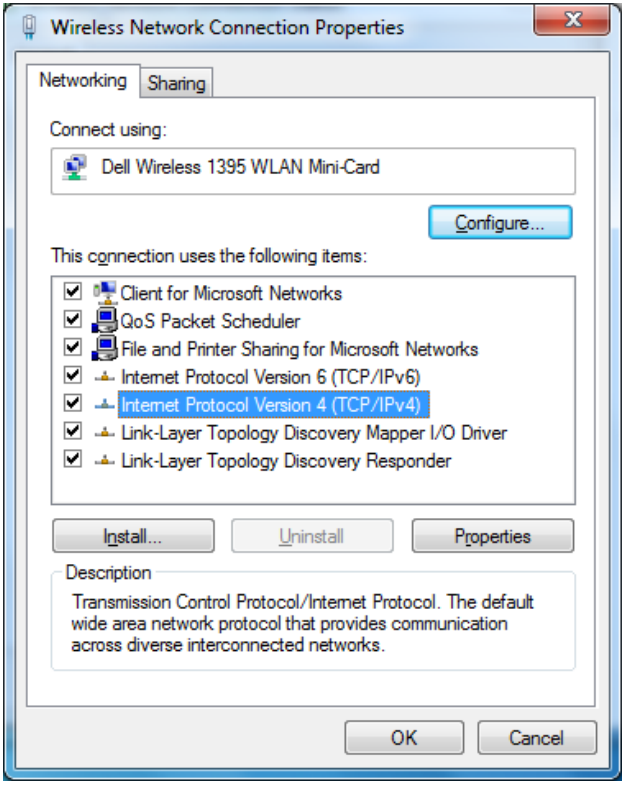


Figure 52

11. Assign the static IP address by selecting ***Use the following IP address*.**
    - The first three values of the IP address (i.e. 192.168.2) must match the Adapter's IP address you wrote down in page 33. The fourth value must be unique from 1 to 255.
    - If using the 192.168.2.xxx IP address range, the Subnet mask will default to 255.255.255.0 when you finish entering the IP address or press **Tab**.
    - The Default gateway IP address should remain blank.

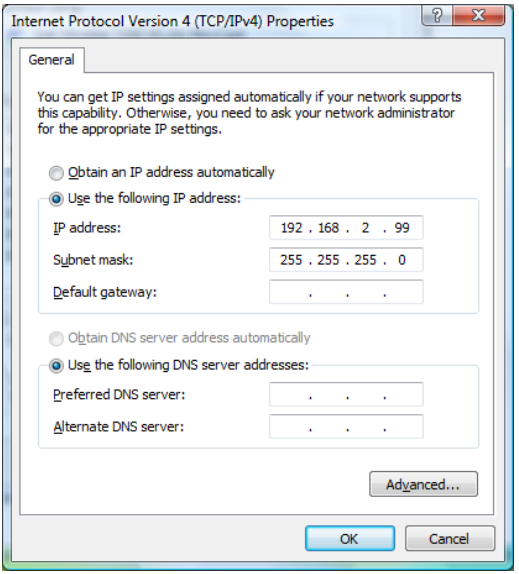

Internet Protocol Version 4 (TCP/IPv4) Properties
General
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address:
192 . 168 . 2 . 99
Subnet mask:
255 . 255 . 255 . 0
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Advanced...
OK
Cancel

Figure 53

12. Click the OK button.
13. Close any remaining network-related windows that are open.

Proceed to the ***Establishing the Connection Between your PC and the Adapter*** on page 75.

Wireless Configuration using Windows® XP

If your PC is using a third-party OEM wireless utility to manage your wireless card, Figure 55 will be displayed. Please consult the OEM manual for instructions on wireless configuration.

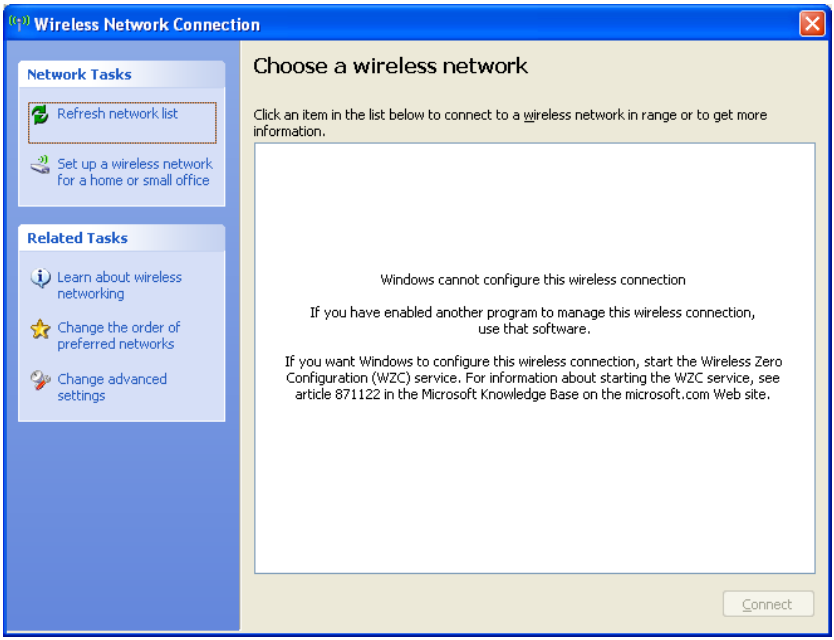

Wireless Network Connection
Network Tasks
Refresh network list
Set up a wireless network for a home or small office
Related Tasks
Learn about wireless networking
Change the order of preferred networks
Change advanced settings
Choose a wireless network
Click an item in the list below to connect to a wireless network in range or to get more information.
Windows cannot configure this wireless connection
If you have enabled another program to manage this wireless connection, use that software.
If you want Windows to configure this wireless connection, start the Wireless Zero Configuration (WZC) service. For information about starting the WZC service, see article 871122 in the Microsoft Knowledge Base on the microsoft.com Web site.
Connect

Figure 54

1. Click the ***Start*** button, then click ***Connect To***, and select ***Wireless Network Connection*** to view this screen.

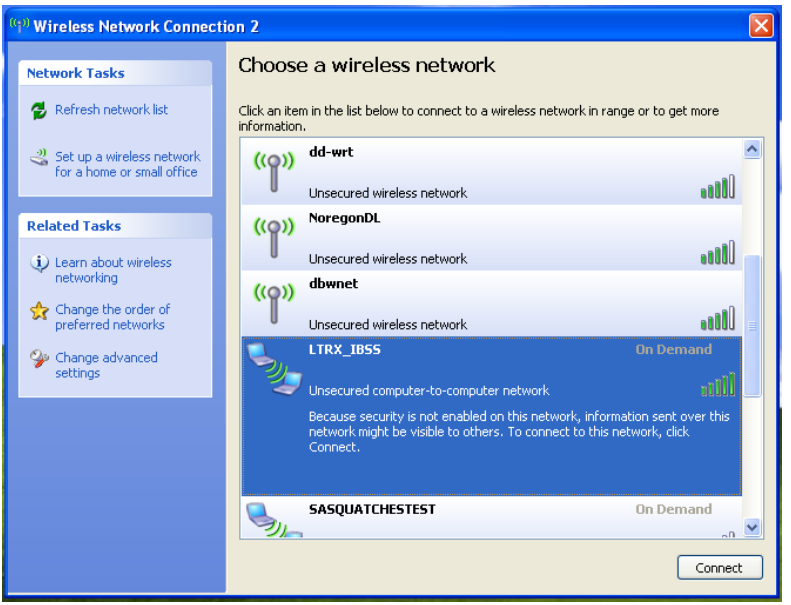

Wireless Network Connection 2
Network Tasks
Refresh network list
Set up a wireless network for a home or small office
Related Tasks
Learn about wireless networking
Change the order of preferred networks
Change advanced settings
Choose a wireless network
Click an item in the list below to connect to a wireless network in range or to get more information.
dd-wrt
Unsecured wireless network
NoregonDL
Unsecured wireless network
dbwnet
Unsecured wireless network
LTRX_IBSS
On Demand
Unsecured computer-to-computer network
Because security is not enabled on this network, information sent over this network might be visible to others. To connect to this network, click Connect.
SASQUATCHESTEST
On Demand
Connect

Figure 55

2. If no networks appear, select **Refresh network list** in the upper left corner of the screen.
3. Scroll down to **LTRX_IBSS** from the list and click ***Connect.***

4. After clicking ***Connect***, this dialogue box indicates an unsecured network connection will be created. Click ***Connect Anyway***.

Wireless Network Connection
You are connecting to the unsecured network "LTRX_IBSS". Information sent over this network is not encrypted and might be visible to other people.
Connect Anyway
Cancel

Figure 56

5. In your System Tray, scroll your cursor over the network icon, right click and select ***Status***.

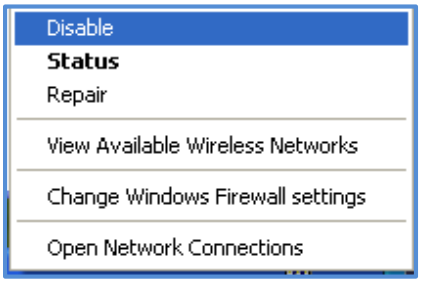


Figure 57

6. Click the ***Properties*** button.

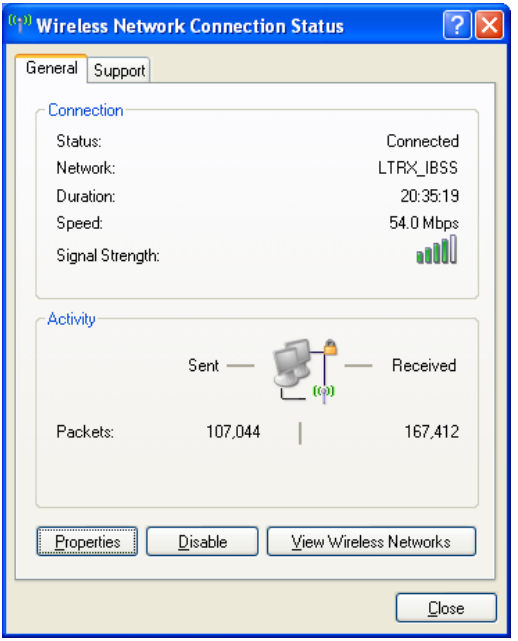


Figure 58

7. Highlight **Internet Protocol (TCP/IP)** and click the ***Properties*** button.

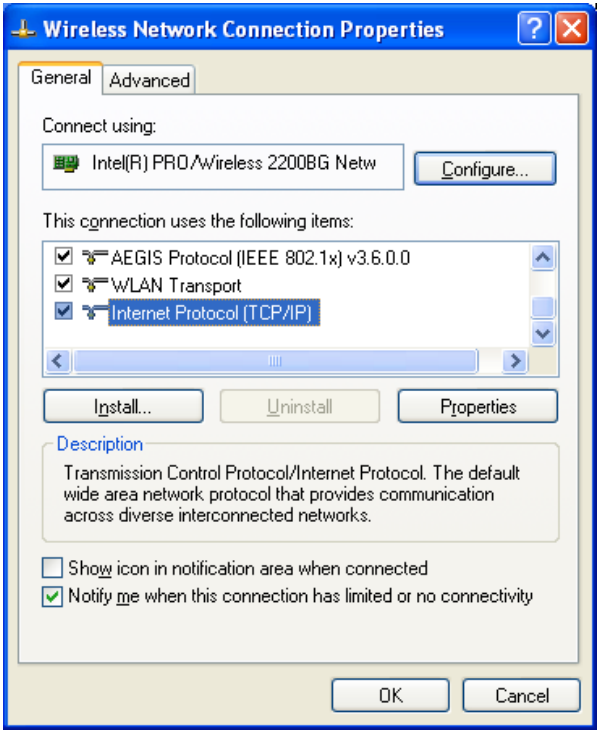


Figure 59

8. Select ***Use the following IP address***: and assign the static IP address.
   - The first three values of the IP address (i.e. 192.168.2.xxx) must match the Adapter's IP address you wrote in on page 33. The fourth value must be unique from 1 to 255.
   - If using the 192.168.2.xxx IP address range, the Subnet mask will default to 255.255.255.0 when you finish entering the IP address or press **Tab**.
   - The Default gateway IP address should remain blank.

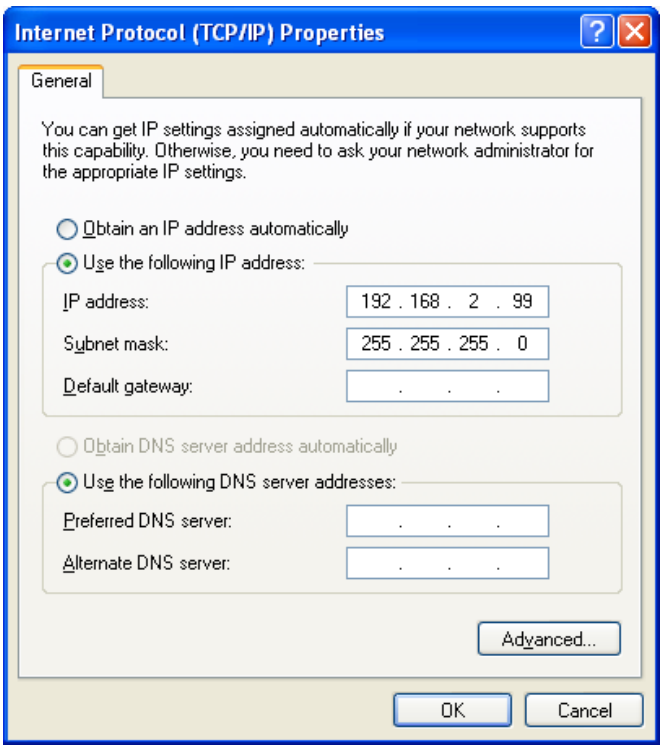

Internet Protocol (TCP/IP) Properties
General
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address:
192 . 168 . 2 . 99
Subnet mask:
255 . 255 . 255 . 0
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Advanced...
OK
Cancel

Figure 60

9. Click the ***OK*** button**.**

10. Click the ***OK*** button to close Wireless Network Connection Properties dialog.
11. Click the ***View Wireless Networks*** button on the Wireless Network Connection Status dialog.
12. Highlight the **LTRX_IBSS** wireless network and click the ***Connect*** button.

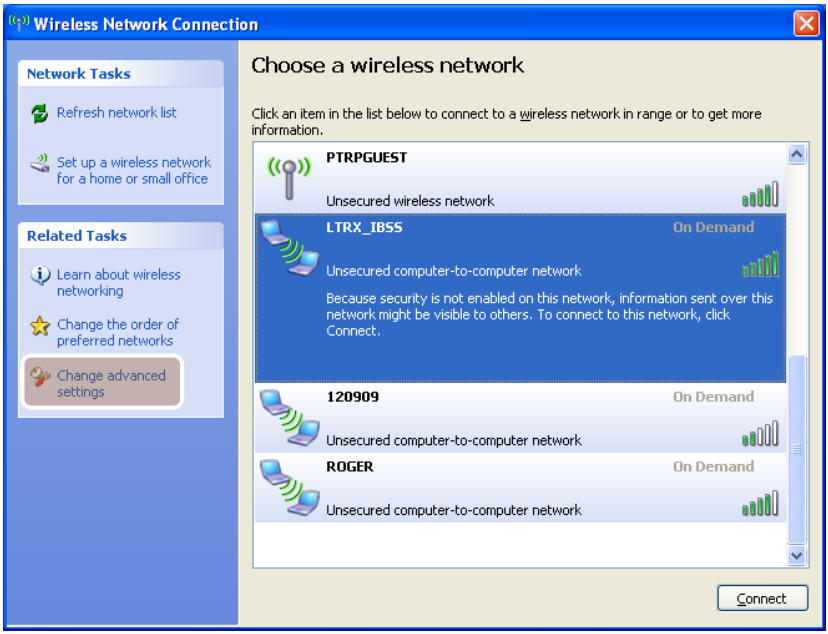

Wireless Network Connection
Network Tasks
Refresh network list
Set up a wireless network for a home or small office
Related Tasks
Learn about wireless networking
Change the order of preferred networks
Change advanced settings
Choose a wireless network
Click an item in the list below to connect to a wireless network in range or to get more information.
PTRPGUEST
Unsecured wireless network
LTRX_IBSS
On Demand
Unsecured computer-to-computer network
Because security is not enabled on this network, information sent over this network might be visible to others. To connect to this network, click Connect.
120909
On Demand
Unsecured computer-to-computer network
ROGER
On Demand
Unsecured computer-to-computer network
Connect

Figure 61

13. On the left side of the dialog, click the ***Change Advanced Settings*** link (see highlighted box in Figure 61 above).

14. Click the ***Wireless Networks*** tab at the top of the Wireless Network Connection Properties dialog.

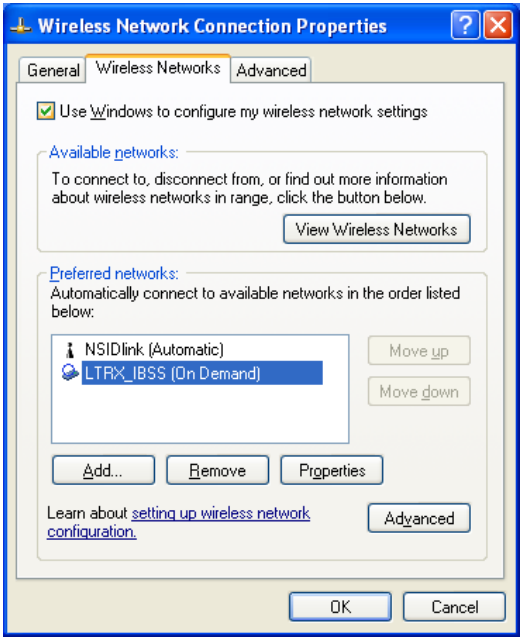


Figure 62

15. Highlight the **LTRX_IBSS** wireless network in the Preferred Network list. Click the ***Properties*** button.

16. Check the checkbox for **Connect even if the network is not broadcasting**.

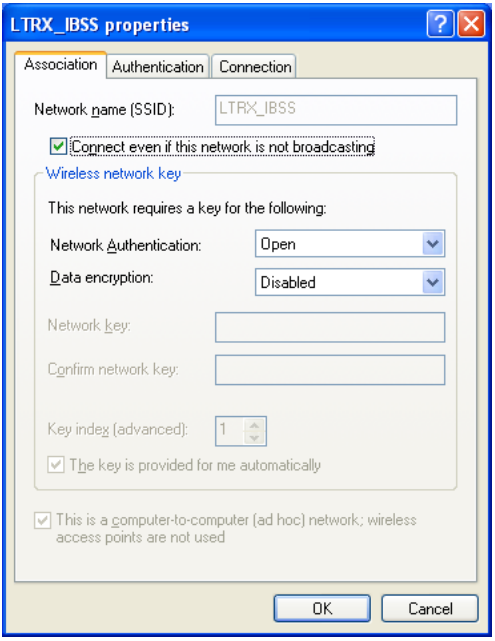


Figure 63

17. Click the ***Connection*** tab at the top of the LTRX_IBSS Properties dialog.

18. Check the checkbox for **Connect when this network is in range**.

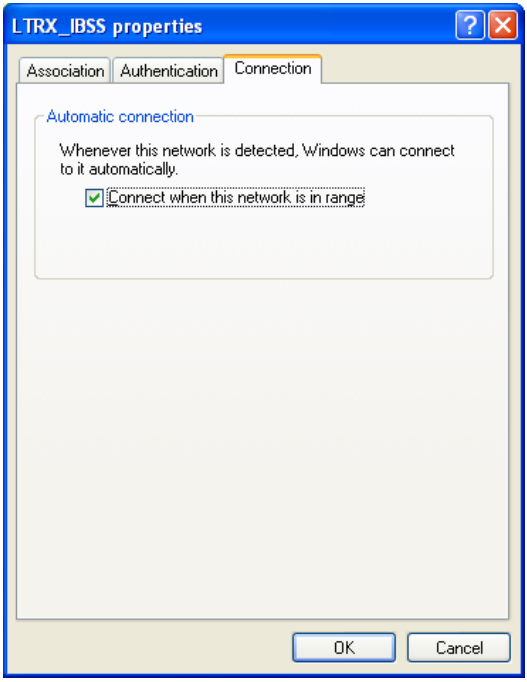


Figure 64

19. Click the ***OK*** button and again the ***OK*** button on the **Wireless Network Connection Properties** dialog.

Establishing the Connection Between your PC and the Adapter

1. Click the ***Search*** button on the JPRO® DLA+ Wireless Configuration Tool toolbar.

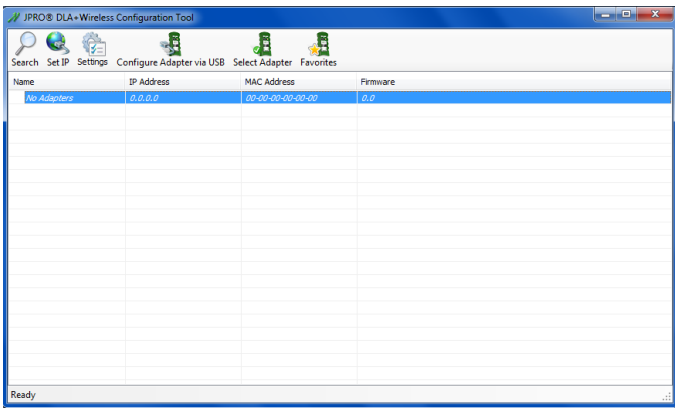


Figure 65

2. The configured DLA+ Wireless Adapter will be listed (Name, IP Address, MAC Address and Firmware are for illustrative purposes).

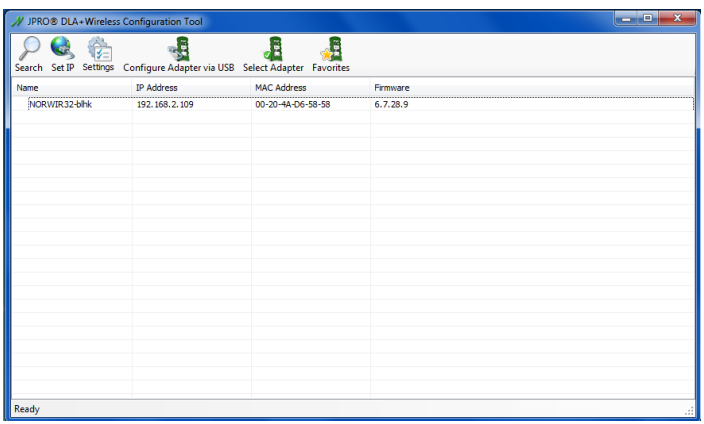


Figure 66

3. Verify that the adapter you are configuring is listed by matching the MAC Address value printed on the label on the back of adapter with an entry in the JPRO® DLA+ Wireless Configuration Tool list.
    a. If your adapter is not listed, click the ***Search*** button again to refresh the list.
    b. If your adapter is listed in **RED text** or is still not listed, go back and compare IP address values on page 30. The first three values must be identical and the last value must be unique from 1 to 255.
    c. If your adapter is grayed out, the connection is unresolved. You can contact your network administrator for information about network status.
    d. If your adapter is still not listed, go to page 79 to use the ***Favorites Feature***.
    e. If your adapter is still not listed in the Configuration Tool please see the ***Technical Support*** section on page 94.

4. Highlight the desired DLA+ Wireless Adapter in the list that will be used for vehicle communications with OEM applications and click the ***Select Adapter*** button.

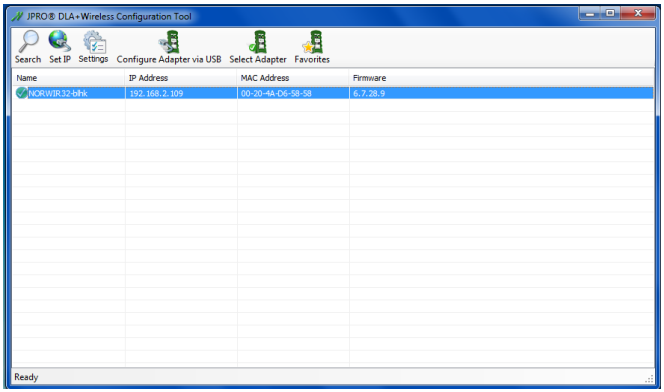


Figure 67

Note multiple adapters that have been configured may be detected and display on a local or corporate network. Be careful to select the appropriate adapter (check the MAC address value) to prevent using an adapter being used by someone else.

Once your configured DLA+ Wireless Adapter is successfully connected to the network, the ”X” icon in your System Tray will change to this green check:

Figure 68

When you scroll your mouse over the icon and right click, this window will display the Adapter’s IP address. Also note the green status bar indicates a

strong wireless connection. If it turns red refer to the ***Wireless Reception Guidelines*** on page 89.

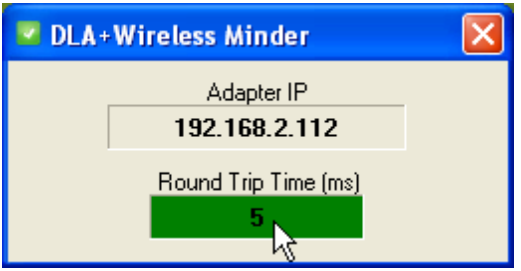


Figure 69

5. Close the JPRO® DLA+ Wireless Configuration Tool window by clicking the **X** button in the top right corner.

Once you have configured a JPRO+ Wireless adapter and made a successful wireless connection, you can disconnect and reconnect that Adapter to the same PC without reconfiguration.

When you disconnect your configured adapter, the DLA+ Wireless Minder green check in the System tray will change:

Figure 70

When you reconnect the configured adapter to the same PC, the "X" will change back to the green "✓".

The Favorites Feature to Select IP Addresses

If a configured DLA+ Wireless Adapter is connected to your local / corporate network, and after clicking the ***Search*** button does not display, the Favorites Feature will allow you to manually enter DLA+ Wireless Adapter IP addresses.

1. Start by selecting the ***Favorites*** button in your DLA+ Wireless Configuration Tool.

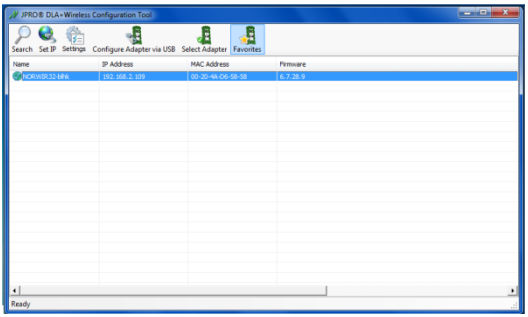


Figure 71

2. After selecting Favorites, select the ***New*** Button.

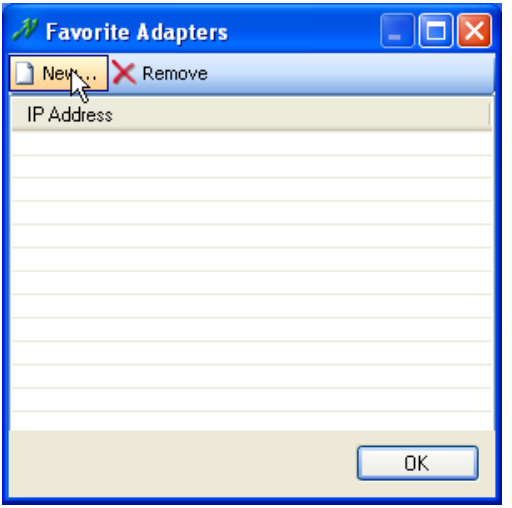


Figure 72

3. Enter the Adapter's IP address in the field and click ***Add.***

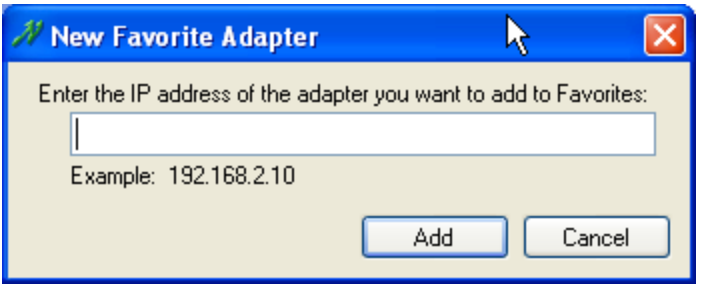


Figure 73

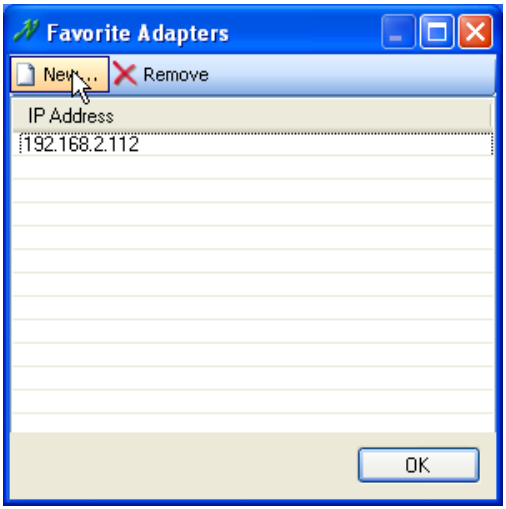


Figure 74

4. The IP Address will be listed and click ***OK***.
5. Return to the Wireless Configuration Tool and click the ***Search*** button again – the configured adapter(s) will display.

Your adapter is ready for use with your diagnostic application!

Windows Security and Firewall Settings

The JPRO® DLA+ Wireless Configuration Tool will attempt to discover the JPRO® DLA+ Wireless adapters connected to your network by sending out requests on TCP and UDP ports 30718. Steps may need to be taken to configure firewall software to allow TCP and UDP ports 30718.

Updating Adapter Firmware

NOTE: Check the Support section of the www.JPROFleetProducts.com website for the latest driver.

Automatic Firmware Update

If a firmware update is required when you connect your JPRO DLA+ Adapter to your OEM application, you will be alerted:

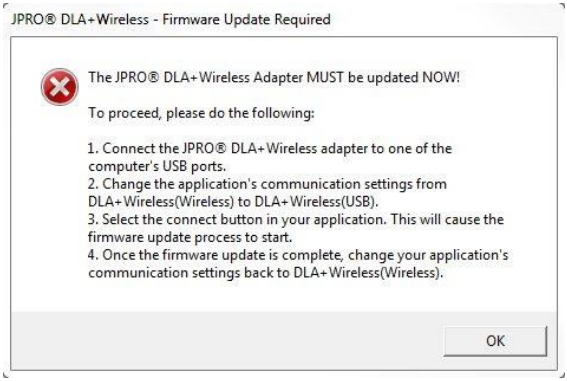

JPRO® DLA+Wireless - Firmware Update Required
The JPRO® DLA+Wireless Adapter MUST be updated NOW!
To proceed, please do the following:
1. Connect the JPRO® DLA+Wireless adapter to one of the computer's USB ports.
2. Change the application's communication settings from DLA+Wireless(Wireless) to DLA+Wireless(USB).
3. Select the connect button in your application. This will cause the firmware update process to start.
4. Once the firmware update is complete, change your application's communication settings back to DLA+Wireless(Wireless).
OK

Figure 75

NOTE: Automatic firmware updates are not supported via a wireless connection. Automatic updates must be made using a USB connection. If you are using a DLA+ Wireless Adapter that is connected wirelessly, and the latest driver detects outdated firmware, an error message will alert you to perform a USB connection instead.

1. When the OEM application connects to the adapter, this dialog displays and you must select ***OK*** to begin auto updates:

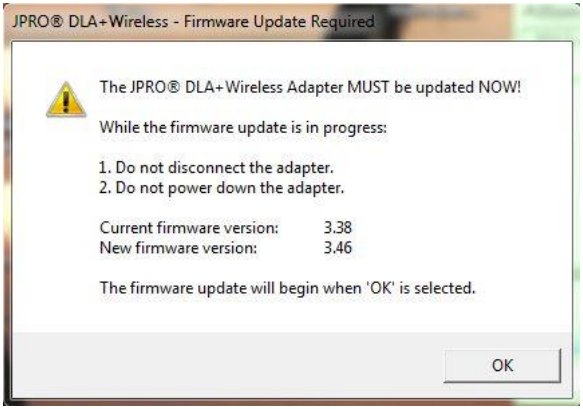

JPRO® DLA+Wireless - Firmware Update Required
The JPRO® DLA+Wireless Adapter MUST be updated NOW!
While the firmware update is in progress:
1. Do not disconnect the adapter.
2. Do not power down the adapter.
Current firmware version: 3.38
New firmware version: 3.46
The firmware update will begin when 'OK' is selected.
OK

Figure 76

2. When you select ***OK*** from the original alert dialog box, this update dialog displays:

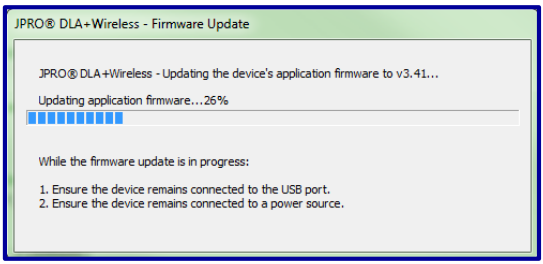

JPRO® DLA+Wireless - Firmware Update
JPRO® DLA+Wireless - Updating the device's application firmware to v3.41...
Updating application firmware...26%
While the firmware update is in progress:
1. Ensure the device remains connected to the USB port.
2. Ensure the device remains connected to a power source.

Figure 77

3. When the update is successfully finished, this screen displays:

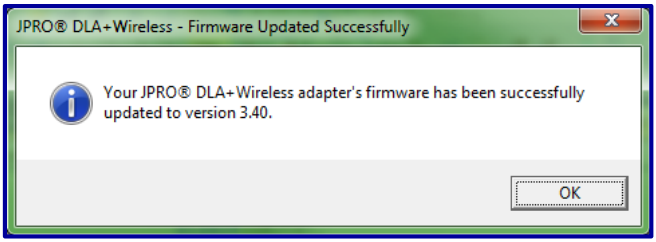

JPRO® DLA+Wireless - Firmware Updated Successfully
Your JPRO® DLA+Wireless adapter's firmware has been successfully updated to version 3.40.
OK

Figure 78

4. If an error is encountered, this type of message displays. Select ***OK*** to return to your OEM application.

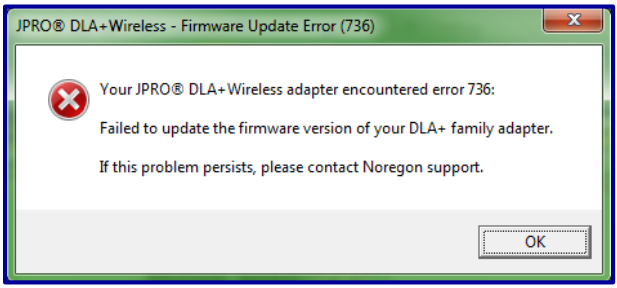

JPRO® DLA+Wireless - Firmware Update Error (736)
Your JPRO® DLA+Wireless adapter encountered error 736:
Failed to update the firmware version of your DLA+ family adapter.
If this problem persists, please contact Noregon support.
OK

Figure 79

Manual Firmware Update

In special circumstances (tests or support), you can also manually update firmware.

To update the firmware (this example uses the JPRO® DLA+ PLC Adapter):

1. Apply power to the adapter.
    a. For DLA+ PLC Adapter users, ensure the adapter is connected to the vehicle via the diagnostic cable and the PC via the USB cable.
        i. The vehicle‘s 6-pin and/or 9-pin diagnostic port is usually located under the dashboard on the driver’s side, or beside the driver’s seat
            1. If the Adapter’s power LED is not illuminated, ensure the vehicle’s key is set to the “ON” position.
    b. For DLA+ and DLA+ Wireless Adapter users, ensure the adapter is connected to the PC via the USB cable.
2. Plug the USB cable into the USB port on the PC.
3. Connect the other end of the USB cable to the port labeled Computer on the adapter.
4. Launch **USB Device Update Tool** from the Start Menu ▶ All Programs ▶ Noregon ▶ JPRO DLA+ PLC Adapter menu.

5. Verify a device shows up in the 'Connected Devices' list column.

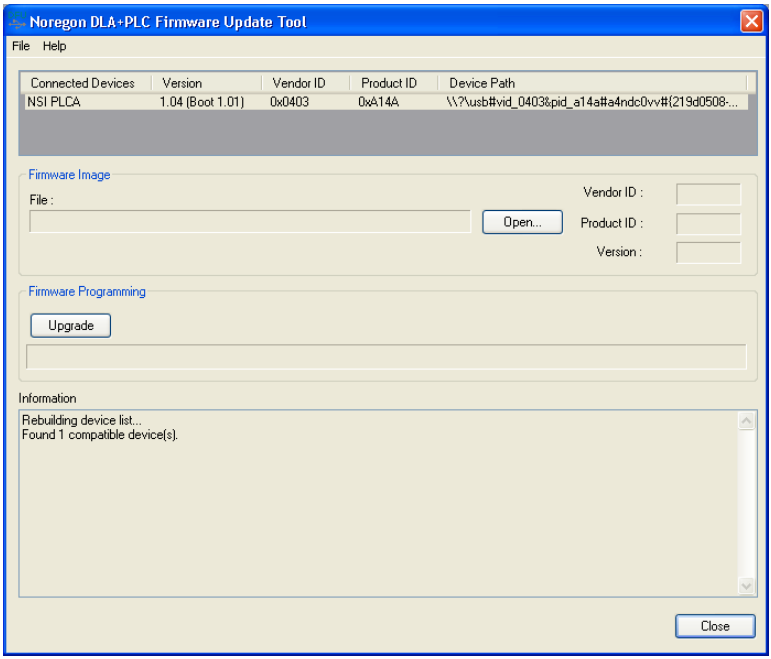


Figure 80

6. Select the ***Open…*** button contained in the 'Firmware Image' section.

7. Highlight the **DLA.dfu** file and then click ***Open***.

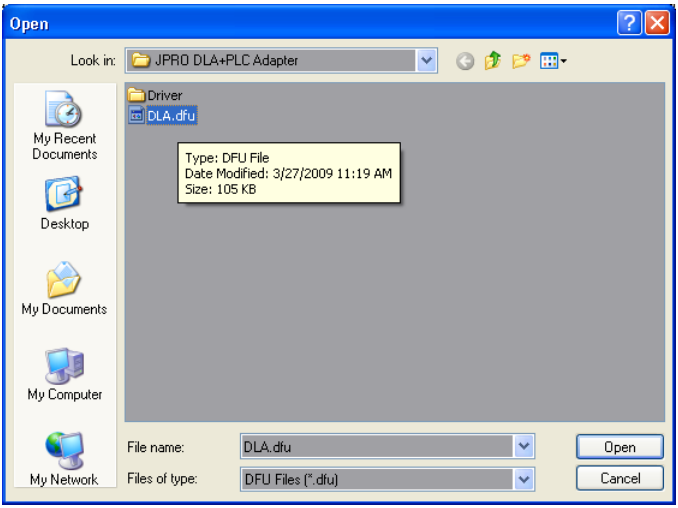


Figure 81

8. Click the ***Upgrade*** button.
9. Click ***Yes*** to continue (do not disconnect or power down device).

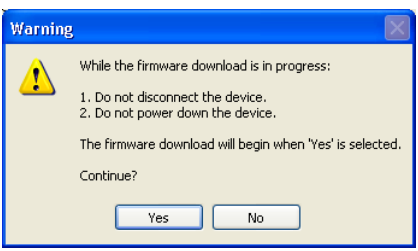

Warning
While the firmware download is in progress:
1. Do not disconnect the device.
2. Do not power down the device.
The firmware download will begin when 'Yes' is selected.
Continue?
Yes
No

Figure 82

10. The device will be programmed.

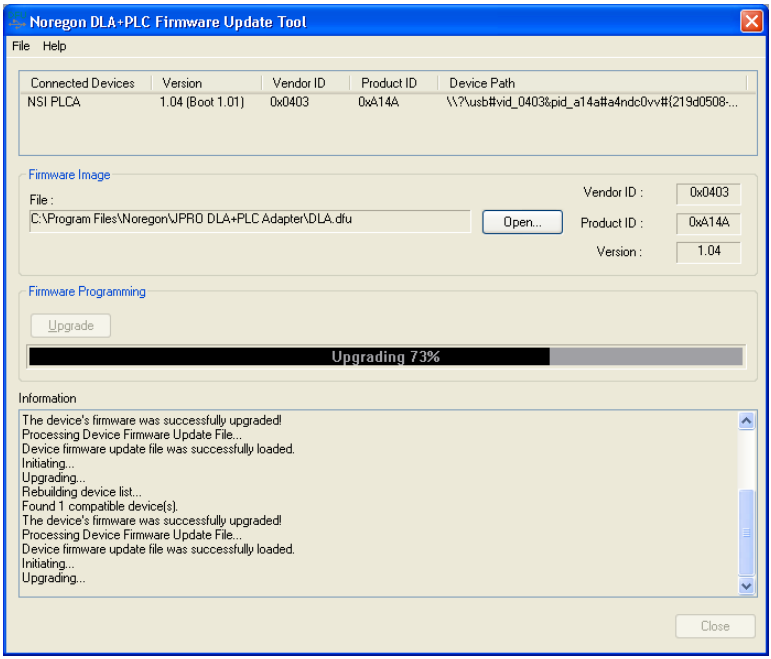


Figure 83

11. Verify that the version is updated in the 'Connected Devices' list column.

Wireless Reception Guidelines for JPRO® DLA+ Wireless

Reduce obstructions between the PC and the DLA+ Wireless:

- All metallic surfaces in the area will reflect radio signals and can disturb and reduce reception.
- Non-metallic obstructions will absorb radio signals and can reduce reception. This includes walls, furniture, other vehicles, etc.

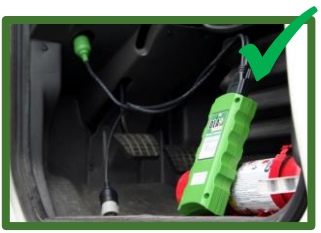
Minimize interference:

- Cordless phones share the 2.4Ghz radio band used by the PC and DLA+ Wireless. These devices will interfere with the radio signal. Use cordless phones that use the 5.8Ghz or 900Mhz bands.
- Microwave ovens radiate in the 2.4Ghz radio band used by the PC and DLA+ Wireless. Keep microwave ovens out of the shop area.
- Cell phones interfere with radio signals – keep phone conversations away from the PC and DLA+ Wireless.
- Electrical machinery causes radio noise. Try to stay away from machinery and take note if the signal is affected when certain equipment is activated.

Maximize antenna reception:

- JPRO® DLA+ Wireless:
    - The DLA+ Wireless' antenna is on the back side of the adapter (opposite the LED's). Keep the back side facing the PC and away from metal surfaces.

- ***The best orientation for the adapter is to be hung vertically with the back facing the PC and away from floorboards or other metal surfaces.***



- PC/Laptop:
  - Keep antennas away from power cords and other computer wires.
  - A laptop's antenna is contained inside the laptop casing – keep the laptop out in the clear and out of any enclosures.
  - If reception is poor, move the PC to another location. Sometimes moving a few feet can help.

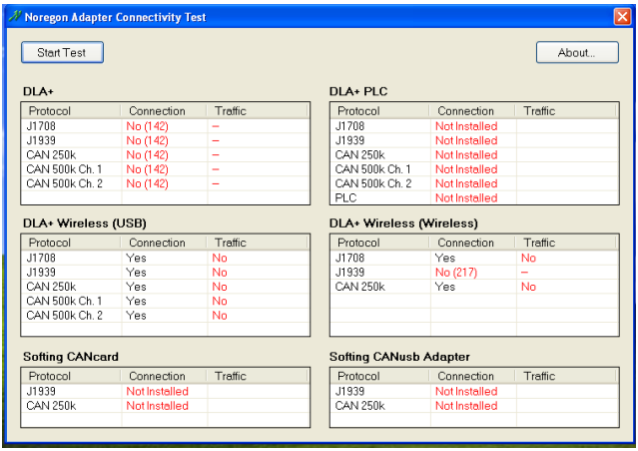
WARNING:

DO NOT ATTEMPT TO USE REPROGRAMMING FEATURES WHILE IN WIRELESS MODE (use USB mode).

Testing Vehicle Connections

Go to **Start** then select **All Programs** **Noregon** **JPRO DLA+ Wireless Adapter** **JRPO DLA+ Connectivity Adapter Suite**.

Select the **Start Test** button.



Within a few seconds this screen will open and the scroll boxes that correspond to the selected adapter will be populated.

NOTE: The screen shot above shows a DLA+ Wireless Adapter with a wireless peer-to-peer connection and connected via USB.

Frequently Asked Questions and Troubleshooting

NOTE: Check the Support section of the www.JPROFleetProducts.com website for the latest FAQs and Troubleshooting steps.

Question	POSSIBLE CAUSES	SOLUTION
The adapter power light is on but my application isn't communicating.	The drivers have not been installed	Check to see that the appropriate drivers were installed
	The drivers have been installed , but the Add Hardware Wizard has not run.(Windows XP only)	Follow the *Installation* instructions on page 12
	The connection settings are incorrect	Check to see that the connection settings are correct
	The cables are not connected	Check to see if the cables are securely connected
	The vehicle ECU is not powered up	Check to see that the vehicle ignition is on
	Voltage to the adapter is not sufficient	Check to see that a minimum of 8.5V? is being supplied

How do I know when the adapter is communicating?		The data light will flash continuously when communication has be established.
Will the adapter read codes?		The adapter alone will not read codes. You will need Fleet Diagnostics or an OEM application to do so.
What applications come with the adapters?		Only the drivers are provided as part of the Adapter kit, any applications must be purchased separately.
Will the adapter adjust parameters?		In order to do parameter adjustments the OEM application must be used along with our adapter.
Will the adapter work with my software.		Check to see if the application is on the list of supported applications and check the setup instructions that came with your application for guidance.

Technical Support

For additional support for connecting your adapter via other protocols, diagnostic applications, speeds, etc., please contact Noregon Systems Help Desk using one of the following:

E-mail: support@noregon.com

Online: http://www.JPROFleetProducts.com/

Phone: 336-970-5567

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